

CITY AND COUNTY OF BRISTOL



THE  
HEALTH OF BRISTOL  
IN  
1960

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3910



# THE HEALTH OF BRISTOL IN 1960

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# GENERAL REVIEW OF THE HEALTH OF BRISTOL 1960

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## THE HEALTH OF BRISTOL IN 1960

My Lord Mayor, Ladies and Gentlemen,

I have the honour to present my fifth Annual Report on the health of the City of Bristol for the year 1960.

### *Population and Marriages*

The population is now 433,750, a further decline of 2,850 since 1959, which is probably due to the housing of over-spill population in adjacent areas. This is the sixth successive year in which the population has declined, and since there has been no increase in the death rate during this period, and it is the younger married age groups who are moving out of the City, the probabilities are that the old age groups are now relatively much greater than they were. The implications are that a greater volume of health and welfare services for the aged will be needed as the years go by. There has been a further rise in the marriage rate—from 15·3 persons married per 1,000 population in 1959 to 15·7 in 1960, and in keeping with the rest of the country, the average age at marriage is getting less.

### *Births*

There were 6,889 births registered in 1960 (226 more than in 1959) giving a birth rate of 15·88 per 1,000 population compared with 15·26 in 1959; this was below the 1959 rate for England and Wales, which was 16·5 per 1,000. Of the total births, 1,788 were delivered in their own home, i.e. 61 cases more than last year; general medical practitioners were present at one third of these cases. The practice continued of early discharge of selected maternity cases from hospital with no apparent untoward effects on mother or child, but this has thrown an increased burden on the domiciliary midwives. In 96 per cent of domiciliary confinements, the mother received either gas and air or trilene analgesia. It is a matter of interest to record that 11 per cent of all antenatal cases in 1960 needed and received dental care.

### *Illegitimacy*

There was disturbing increase in the number of illegitimate births to Bristol women—from 322 in 1959 to 433 in 1960 (4·8 per cent to 6·3 per cent). Even more disturbing to public opinion is the fact that young “teen-age” pregnancies are becoming increasingly common. There is no ready explanation of this phenomenon of apparent lapse in moral standards, but it should not be forgotten that the earlier and higher standard of physical maturation of boys and girls, for which the public health service must claim some credit, is certainly one of the factors in the situation. It may be that, for the time being, biological progress for the human species has not been matched by social and moral standards.

### *General Mortality*

In 1960, there were 5,260 deaths of Bristolians, giving an adjusted death rate of 11·89 per 1,000, compared with 11·49 per 1,000 for 1959. There has been a slow, but steady, increase in the proportion of deaths which take place in hospital, e.g. in 1956, about 39 per cent of all deaths were in hospital, but in 1960, 44 per cent. In the age group 1—15 years, the death rates are minimal (about 0·7 per cent of all deaths); indeed, upwards of 72 per cent of all deaths are now in the age groups 65 and over.

The principal causes of death remain in the order of—diseases of the heart and circulation; cancers, including leukaemia; vascular lesions of the central

nervous system and respiratory diseases. Once again, there was an increase in deaths attributed to coronary disease and angina—from 847 to 975, and most of this increase has been in the age group 45—64 years. There was only a slight fall in deaths from cancer of the lung and bronchus—from 214 to 202; the ratio of male to female cases was 8 : 1.

#### *Infant Mortality (including Neonatal mortality) and Still Birth Rates*

There were 136 deaths of infants under the age of one year in Bristol during the year, giving an infant mortality rate of 19·7 per 1,000 compared with 19·5 per 1,000 for 1959. The neonatal death rate was 14·4 per 1,000, compared with 14 per 1,000 for 1959. Considering the large increase in illegitimacy during the year, the infant mortality rate and neonatal mortality rate may well have been a very much higher than for 1959; that the increase has been so small, speaks highly for the excellent health and social care of the unmarried mother in this City. Still births during the year totalled 101, giving the phenomenally low still birth rate for a large city of 14·5 per 1,000 total births—the previous lowest rate of 17·8 per 1,000 being recorded in 1958.

In consequence of the reduced number of still births, the perinatal mortality rate reached the remarkably low figure of 26·9 per 1,000 live and still births.

There was one maternal death during the year due to Septic Abortion.

Such a splendid record of maternal and child health should not pass without comment, and it was very fitting that during the year, Bristol was the City chosen for the Annual Conference of the Maternal and Child Welfare Association. At that Conference, tribute was paid by the Minister of Health to the progressive policy followed by the Health Committee and to the integration of their service with the work of general medical practitioners, paediatricians and obstetricians. Much of the credit for this should be given to Dr. Sarah Walker, your Senior Medical Officer for Maternal and Child Health, whose unflagging efforts on behalf of mothers and children in this City cannot be praised too highly.

#### *Notifiable Diseases*

Last year, I drew attention to the poor state of protection of Bristol children against diphtheria and of the danger of outbreaks recurring. I am pleased to record that in spite of our low protection rate, we have not suffered the fate of some other towns which had outbreaks of infection during the year. The year 1960 was, in fact, the eleventh in succession with no confirmed case of diphtheria, and the fourteenth consecutive year with no death from this disease. Efforts from springtime onwards to increase the numbers of children protected, met with a minimum of success until November (following well publicised outbreaks in other parts of the country) when a new drive in the schools produced a better response from parents. As a result, by the end of the year the immunity index for children under 15 was increased from 34·2 to 40·7. Although the continuing campaign in 1961 is likely to push the figure still higher, at the time of writing this Report (August, 1961) it is still far too low to give any real measure of security against this disease.

For the first time for well over a decade, there were no cases of poliomyelitis in the City, and this satisfactory state of affairs can only be attributed to the good public response to our poliomyelitis inoculation campaigns; indeed, by the end of 1960, 82 per cent of children aged 0—15 had completed a primary course, and 61 per cent had also received "booster" injections. Unfortunately, the same good results cannot be recorded for young and middle aged adults (i.e. 16—40 years) for whom the figures are 22 per cent who had completed a

primary course, and 14 per cent had received a booster infection by the end of the year.

Arrangements were made during the year to collaborate with the Medical Research Council and the Ministry of Health in live polio vaccine trials. Twenty five co-operating families were recruited, and although it is understood that the trials have proved to be satisfactory, no official publication has yet been issued.

Towards the end of the year 1959, the Department was aware, even in the absence of notification, that infectious hepatitis was becoming more prevalent in school children. In 1960, it became apparent that we had a sizeable epidemic in our midst and that this appeared to be coupled with an increased incidence of another non-notifiable disease—*infectious mononucleosis*. It was not until December 1st that both of these diseases were made notifiable in Bristol, but by the end of the year we had recorded (from unofficial and official sources) 1,162 cases of hepatitis and 76 cases of mononucleosis, and the epidemic is still continuing in 1961. The brunt of the infection with the hepatitis virus is being borne by children of school age, and in the absence of any knowledge of how to control this disease, but on the supposition of a gastro-intestinal method of spread, efforts were made during the year to improve school hygiene and personal hygiene practises. It is probable that by the time this epidemic subsides, it will be the largest of this disease ever recorded in any City. By the end of the year, two deaths from this disease and 74 cases were severe enough to need hospital admission.

Although the number of food poisoning cases notified was only 184 (182 in 1959) an outbreak of salmonellosis in the nursery and maternity block at Southmead Hospital caused some disruption in the Maternity Services. Eleven people were involved and one baby died, and while the action taken cleared up the outbreak, the original source of infection remains in doubt.

#### *Administrative Developments*

During 1960, a number of administrative re-arrangements were made within the Department.

After prolonged discussions, the City, in February 1960, finally assumed full responsibility for the home nursing service, the Agency arrangement with the Bristol District Nursing Association being terminated. The administrative staff of the nursing service was rehoused at the Central Health Clinic in a suite adjacent to the Chief Nursing Officer and Superintendent Midwife. Field arrangements, including the mechanism for use of the service by the public and general medical practitioners remained undisturbed. The transfer was carried out smoothly, which is a tribute to the goodwill and co-operation of all concerned, and there can be little doubt that the new arrangement will facilitate integration of the nursing and domiciliary services.

In January, the Public Analytical Department was transferred from the University to the City Public Health Department and the City and University opened joint premises in Prince Street which are now used for teaching and research purposes. The joint Statistical Unit was transferred to Prince Street from the Central Health Clinic, the Health Visitor Training Course from 36 Queens Square to Prince Street, and the Food and Drugs Section of the Public Health Inspector's Department was transferred from Canyng Hall to 36 Queen Square. In addition, in order to provide much needed accommodation at the Central Clinic, the Home Help Section was transferred to 36 Queen Square.

This series of moves all had to be planned with great care, and in considerable detail and the fact that all of them were accomplished with a minimum of disruption for members of the staff or the public, speaks highly for the senior lay administrative staff on whom most of the burdens fell.

The acquisition of the Prince Street Training Centre has been of considerable advantage and has relieved some of the pressure on the accommodation at the Central Clinic. Nevertheless, it remains true that until the new Headquarters building, which will also house the Sanitary and Mental Health Sections, can be provided in Castle Street, it will be impossible to provide a completely integrated administration. The provision of a new Central Ambulance Station is dependent upon this development and members of the Council will be aware of the grave difficulties under which some of the men are working at the present time. These developments become even more urgent in view of the unsatisfactory conditions of the existing ambulance stations and the probable demolition for road widening purposes in the near future of one of them, and also because of the increasing demand made on the Service in 1960 (from 150,633 calls in 1959 to 159,151 calls in 1960). These demands are likely to increase further as more day hospitals and social therapy clubs are opened for the mentally disordered.

In common with other Departments of the Corporation, the administrative working of the Health Department was investigated during the year by an independent team of "organisation and methods" consultants. They spent 3—4 months in the Department and their report is awaited with interest.

During the year, a new clinic was opened at Withywood—the "Amelia Nutt" (in honour of the long and distinguished service to public health of Alderman Mrs. Nutt). Dr. Albertine Winner, the Minister's Principal Medical Officer for the South-West Region, performed the opening ceremony. No more fitting tribute could have been paid to Alderman Mrs. Nutt and to Dr. Winner whose great help over the years has done so much to provide the City with adequate health services. The clinic serves the Withywood estate and by the end of the year had become an important service to the people living there.

It is nine years since the X-ray Department was equipped at the Central Health Clinic, and during the year it was necessary to install new equipment.

One other new administrative arrangement was made during 1960. The retirement of the Tuberculosis Executive Officer opened up the possibility of a partial re-organisation of Care and After Care work within the Department. For many years, the Tuberculosis Section had been responsible for care arrangements for the tuberculous person (in association with the Voluntary Tuberculosis After Care Committee) and also for arrangements relating to notification, liaison with chest physicians and B.C.G. vaccination.

A new section of Care and After Care was created in the charge of a Head Almoner and care arrangements for Tuberculosis are now but a part of this new section, which now has far wider responsibilities and closer co-operation with the Almoning Departments of the acute general hospitals. Notification of Tuberculosis, and B.C.G. vaccination were transferred to the re-organised section of Epidemiology and Statistics. It is anticipated that, as the years go by, increasing responsibilities will fall on the new section of Care and After Care.

#### *Chiropody*

During 1960, the Department, in keeping with all other Local Health Authority Departments in the country, became responsible for the provision of a Chiropody Service for selected classes of the population. Old people, handicapped persons and expectant mothers form the priority classes. Hitherto, chiropody for the elderly has been carried out on a small but very useful scale by Bristol Old Peoples' Welfare Association. By agreement with them, the Local Health Authority has gradually taken over and decentralised the service at peripheral clinics, and there will be a gradual expansion as more chiropodists (who are at present in short supply) become available. This is valuable work,

particularly on behalf of the aged who, through the help given, are enabled to remain ambulant instead of becoming chair, or even bed bound.

#### *Mental Health*

Reference is made in the Report to further developments in the Mental Health Service. From the 1st November, it became possible to implement all the provisions of the Mental Health Act. Reference has been made in previous reports to the far reaching developments which will be needed to make the provisions of the Act effective. There will be an increasing need to collaborate with psychiatrists and psychiatric hospitals, and it is pleasing to record our partnership with Glenside Hospital in the establishment of a unique factory (Industrial Therapy Organisation (Bristol) Ltd.) for the rehabilitation of chronic psychotic patients, which dates from March 1960. In addition, the Health and Housing Committees are collaborating, as a further development in this scheme, with the hospital which envisages the provision of 6 to 7 special houses for ex-hospital cases.

Other developments in the Mental Health Service in 1960 include the opening of the Townsend Youth Club at Marlborough House in May 1960, the provision of a new establishment for mental welfare officers, including a trainee scheme and the inauguration of a "pilot" social therapy club for the elderly mentally infirm at Southmead Clinic. It is also pleasing to record that final approval was given by the Ministry of Health and the City Council to the building of the new Training and Industrial Centre on the Bush Estate.

#### *Environmental Health*

Attention is drawn to important developments in the section of the Report compiled by the Chief Public Health Inspector. Considerable progress was made during the year with the clean air programme. A new and comprehensive training scheme for public health inspectors has been introduced. New problems are arising from the sale of food from vending machines, while old problems such as the contamination of milk and meat by tubercle bacilli have almost been eliminated by the national eradication programme. Nevertheless, problems of food hygiene are still considerable. Public ignorance or apathy about the need for clean food is still rife, and once again the Chief Public Health Inspector highlights the need for, and the potential value of, a Food Hygiene Centre for educational purposes.

The slum clearance programme was slowed down considerably during the year. Undoubtedly, some of the very worst slums have been cleared in Bristol, but many obsolete or obsolescent properties remain. Present effort is being concentrated on the conservation of obsolescent properties by improvement and repair.

In this brief survey of 1960, it has been impossible to refer to many other developments in the Department, which are given in later pages of the Report, but I would like to extend my grateful thanks to the many officers, both within and outside the Department, who have made it possible to record once again a very successful year. My thanks are also due to the Chairman, Vice-chairman and members of the Health Committee and City Council for their unfailing support and guidance throughout the year.

I am,

Your obedient servant,

R. C. WOFINDEN,

*Medical Officer of Health.*



## THE HEALTH COMMITTEE 1960

*Chairman:*

Alderman G. P. C. FORD

*Vice-Chairman:*

Mr. W. W. CLOTHIER

*Aldermen:*

Mrs. A. M. CHAMBERLAIN

J. J. MILTON, O.B.E., J.P.

Mrs. A. E. NUTT

*Councillors:*

W. E. BLACKMORE

S. T. GAMLIN

Mrs. H. BLOOM

W. GRAVES

W. A. BUSH

Mrs. P. M. JACOB

Mrs. M. E. CASTLE, J.P.  
(resigned July 1960)

A. E. C. TUDBALL  
(member until September 1960)

K. I. CRAWFORD

H. TRAPNELL  
(replaced Mrs. Castle July 1960)

B. J. M. DAVIES

A. B. ABRAMS

W. H. ENGLAND

(replaced Mr. Tudball Nov. 1960)

## PUBLIC HEALTH STAFF, 1960

**Medical Officer of Health** (City, Port and Schools): R. C. WOFINDEN, M.D., B.S., D.P.H., D.P.A.

*Deputy Medical Officer of Health:* J. F. SKONE, M.D., B.S., D.C.H., D.P.H., D.I.H.

### Principal Assistants

*Chief Assistant Medical Officer of Health and Senior Medical Officer for Mental Health:* H. TEMPLE PHILLIPS, M.D., B.S., D.I.H., D.C.H., D.P.H.

*Senior Medical Officer—Port:* D. T. RICHARDS, M.R.C.S., L.R.C.P., D.P.H.

*Senior Medical Officer—School Health Service:* A. L. SMALLWOOD, M.D., D.C.H., D.P.H.

*Senior Medical Officer—Maternal and Child Health:* SARAH C. B. WALKER, M.D., B.S., D.P.H.

*Senior Medical Officer—Epidemiology:* P. W. BOTHWELL., M.B., CH.B., D.P.H.

*Chief Dental Officer:* J. McCaig, L.D.S., R.F.P.S.

*Chief Public Health Inspector:* F. J. REDSTONE, F.R.S.H., F.A.P.H.I.

*Chief Administrative Officer:* P. J. ROOM.

*Chief Nursing Officer:* Miss L. M. BENDALL, S.R.N., S.C.M., H.V.CERT.

### Technical Officers

*Health Education Officer:* P. MACKINTOSH, B.A.

*Medical Records Officer:* Miss E. H. L. DUNCAN, M.A., B.Sc. (resigned 22.10.60)

*Nutritionist:* Miss M. CHAPMAN.

### Consultant Bacteriologist

Professor K. E. COOPER, B.Sc., PH.D., M.R.C.S., L.R.C.P., A.I.C.

### Deputy Consultant Bacteriologist

H. R. CAYTON, M.B., CH.B.

### Scientific Adviser

E. G. WHITTLE, B.S.C., F.R.I.C.

## SUMMARY OF VITAL STATISTICS

### **Population**

The Registrar General has estimated the home population (including H.M. Forces stationed in the area) at mid-year 1960 to be 433,750, a decrease of 2,850 from that for the previous year. The rates for 1960 are based upon this estimated figure.

The figures given in the following tables for births, stillbirths, and deaths (but not marriages) are those allocated by the Registrar General to Bristol as registered during the respective years and corrected for inward and outward transfers according to residence.

			<i>1959</i>	<i>1960</i>
Estimated home population (mid-year)	.. ..	436,000	433,750	
Marriages	.. ..	3,334	3,407	
Rate (persons married) per 1,000 population	.. ..	15.3	15.7	
Births registered during year	.. .. ..	6,663	6,889	
Rate per 1,000 population	.. ..	15.26	15.88	
Rate per 1,000 population adjusted (ACF. 1960 1.00)	.. .. ..	15.26	15.88	
Stillbirths registered during year	.. .. ..	134	101	
Rate per 1,000 total births	.. .. ..	19.71	14.45	
Deaths registered during year	.. .. ..	5,174	5,260	
Crude rate per 1,000 population	.. .. ..	11.85	12.13	
Adjusted rate per 1,000 population (ACF. 1960 0.98)	.. .. ..	11.49	11.89	
Natural increase (per 1,000 population)	.. ..	3.41	3.76	
Deaths under one year registered during year	.. ..	130	136	
Rate per 1,000 live births registered during year	.. ..	19.5	19.7	
Deaths under four weeks registered during year	.. ..	93	99	
Rate per 1,000 live births registered during year	.. ..	14.0	14.4	
Deaths under one week registered during year	.. ..	82	87	
Rate per 1,000 Live births registered during year	.. ..	12.31	12.63	
Peri-natal mortality (Still births plus 1st week deaths)	.. ..	216	188	
Rate per 1,000 total (Live and Still) births	.. ..	31.8	26.9	
Deaths from puerperal causes registered during year	.. ..	2	1	
Rate per 1,000 total births registered during year	.. ..	0.29	0.14	

### **Marriages**

		Number of marriages during year	Rate persons married per 1,000 popn.
1960	.. ..	3,407	15.7
1959	.. ..	3,334	15.3
1958	.. ..	3,213	14.67
1957	.. ..	3,446	15.68
1956	.. ..	3,581	16.26
1955	.. ..	3,535	15.98
1954	.. ..	3,377	15.18
1953	.. ..	3,460	15.58
1952	.. ..	3,585	16.15
1951	.. ..	3,506	15.88
1950	.. ..	3,512	15.87
1949	.. ..	3,783	17.20
1948	.. ..	3,786	17.41

### **Births**

	1950	1951	1952	1953	1954	Year 1955	1956	1957	1958	1959	1960
<i>R.G.'s figures:</i> —											
Registered live births (Bristol citizens)	7,096	6,872	6,760	6,945	6,691	6,531	6,669	6,984	6,978	6,663	6,889
Birth rate per 1,000 pop.	16.03	15.56	15.23	15.63	15.04	14.76	15.14	15.89	15.93	15.26	15.88

Live births notified in Bristol during the year	7,897	7,511	7,557	7,781	7,641	7,469	7,785	8,324	8,580	8,265	8,815
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(Births are notified in the district where they occur)	..	727	844	900	917	1,060	1,129	1,259	1,429	1,587	1,671
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Non-citizens included above (notified)	..	1,921
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**Illegitimacy** (Rate: 63 per 1,000 live births registered during year).

	1959	1960
Registrar General's total—		
Illegitimate live births (corrected for residence) .. ..	322	433

Illegitimate live births as percentage of total (corrected) live births .. .. .. .. .. ..

4·8     6·3

**Stillbirths** Total No. (corrected by R.G. for residence) registered during 1960—101 (1959—134). Rate: 14·5 per 1,000 total births registered.**Deaths** Rate: (Crude) 12·13 per 1,000 population.

(Adjusted) 11·89 per 1,000 population (Area Comparability Factor 0·98).

During 1960 the total number of deaths actually occurring in Bristol within the year was 5,805 of which 918 were non-citizens. The number of inward transfers in respect of citizens who died outside the City area was 384.

The Registrar General's corrected figure for deaths of Bristol citizens registered during 1960 is 5,260 and the crude death rate is 12·13 per 1,000 population. Comparable figures of the Registrar General for 1959—5,174 deaths and the rate—11·85.

**Natural Increase** Rate: 3·76 per 1,000 population.

	1960	1959
Bristol births registered during year .. .. .. .. ..	6,889	6,663
Bristol deaths registered during year .. .. .. .. ..	5,260	5,174
Natural increase .. .. .. .. ..	+1,629	+1,489

**Infant Mortality** (Rate: 20).

Total deaths of Bristol citizens under 1 year of age registered during 1960 .. .. .. .. ..	136
Rate per 1,000 registered live births (Bristol citizens) .. .. .. .. ..	19·7

	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950
Legitimate infant mortality rate per 1,000 legitimate live births reg. in the year .. .. .. .. ..	19·4	18·9	20·3	18·1	19·6	18·9	20·7	22·3	20·9	20·2	23·0
Illegitimate I.M. rate per 1,000 illegitimate L.B. registered in the year ..	25·4	31·1	26·8	23·9	13·7	24·6	22·0	12·9	33·1	24·8	29·0

**Neo-Natal Deaths** (*i.e.*, deaths under four weeks of age).

Total deaths of Bristol citizens in this age-group, registered during 1960 .. .. .. .. ..	99
Rate per 1,000 registered live births (Bristol citizens) .. .. .. .. ..	14·4

During 1960 the deaths of 99 babies during the first four weeks of life were registered (Bristol citizens). (Comparable figure for the year 1959 is 93).

These deaths represent 73 per cent of the total infants (Bristol citizens) dying under one year of age (72 per cent in 1959).

In 1960, 43 of these deaths occurred on the first day and 44 in the remainder of the first week.

For 1960, of the total of 99 neo-natal deaths, shown by the Registrar General, 8 were of illegitimate babies. This gives a legitimate neo-natal mortality rate of 14·1 per 1,000 legitimate live births registered in 1960 and an illegitimate neo-natal mortality rate of 18·5 per 1,000 illegitimate live births registered in 1960.

**Maternal Mortality** There was only one death, septic abortion. This gives a rate of 0·14 per 1,000 total births (live and still) registered during the year.

**VITAL STATISTICS**

**TABLE I. Population, marriages, births, deaths, natural increase, infant mortality—for Calendar Year 1960 and previous six years—  
(Registrations during year)**

*Supplied by the Registrar General*

	1960	1959	1958	1957	1956	1955	1954
<b>Estimated population. Home (mid-year):</b>	433,750	436,600	438,000	439,600	440,500	442,500	444,900
<b>Marriages:</b>							
Number .. . . .	3,407	3,334	3,213	3,446	3,581	3,535	3,377
Rate persons married per 1,000 population .. . . .	15.7	15.3	14.67	15.68	16.26	15.98	15.18
<b>Birth registrations:</b>							
Legitimate—males .. . . .	3,329	3,313	3,416	3,444	3,271	3,216	3,298
females .. . . .	3,127	3,028	3,226	3,205	3,105	3,030	3,075
Illegitimate—males .. . . .	231	166	175	166	150	152	158
females .. . . .	202	156	161	169	143	133	160
Total .. . . .	6,889	6,663	6,978	6,984	6,669	6,531	6,691
Rate per 1,000 population .. . . .	15.88	15.26	15.93	15.89	15.14	14.76	15.04
Illegitimate live births per cent of total live births .. . . .	6.3	4.8	4.8	4.8	4.4	4.4	4.8
<b>Stillbirth registrations:</b>							
Legitimate—males .. . . .	49	63	62	73	85	66	72
females .. . . .	40	63	55	78	72	57	81
Illegitimate—males .. . . .	4	1	3	5	4	6	2
females .. . . .	8	7	2	2	9	6	5
Total .. . . .	101	134	122	158	170	135	160
Rate per 1,000 live and still-births .. . . .	14	20	17	22	25	20	23
<b>Total live and still-births .. . . .</b>	<b>6,990</b>	<b>6,797</b>	<b>7,100</b>	<b>7,142</b>	<b>6,839</b>	<b>6,666</b>	<b>6,851</b>
<b>Death registrations:</b>							
Males .. . . .	2,617	2,573	2,613	2,586	2,727	2,647	2,583
Females .. . . .	2,643	2,601	2,614	2,598	2,668	2,561	2,582
Total .. . . .	5,260	5,174	5,227	5,184	5,395	5,208	5,165
Rate per 1,000 population .. . . .	12.13	11.85	11.79	12.25	11.77	11.61	11.61
<b>Natural increase per 1,000 population .. . . .</b>	<b>3.76</b>	<b>3.41</b>	<b>4.00</b>	<b>4.09</b>	<b>2.89</b>	<b>2.99</b>	<b>3.43</b>
<b>Deaths under one year (registered):</b>							
Legitimate .. . . .	125	120	135	120	125	118	132
Illegitimate .. . . .	11	10	9	8	4	7	7
Total .. . . .	136	130	144	128	129	125	139
Rate per 1,000 live births .. . . .	20	20	21	18	19	19	21
Legitimate infant mortality rate—per 1,000 live births, legitimate .. . . .	19	19	20	18	20	19	21
Illegitimate I.M. rate per 1,000 live births, illegit. .. . . .	25	31	27	24	14	25	22
Deaths under four weeks: Total deaths .. . . .	99	93	101	96	97	83	106
Neo-natal mortality rate per 1,000 live births .. . . .	14	14	14	14	15	13	16
<b>Diarrhoea and Enteritis (under two years):</b>							
Deaths .. . . .	1	1	2	3	2	3	1
Rate per 1,000 live births .. . . .	0.15	0.15	0.29	0.43	0.30	0.46	0.15
<b>Maternal mortality (including abortion):</b>							
Deaths from:							
Sepsis of pregnancy, childbirth and the puerperium .. . . .	—	—	—	—	1	1	1
Abortion with toxæmia .. . . .	—	—	—	—	—	—	1
Other toxæmias of pregnancy and the puerperium .. . . .	—	—	—	1	—	—	1
Haemorrhage of pregnancy and child-birth .. . . .	—	—	—	—	—	—	—
Abortion without mention of sepsis or toxæmia .. . . .	—	—	1	—	—	—	—
Abortion with sepsis .. . . .	1	—	—	—	—	—	—
Other complications of pregnancy, childbirth and the puerperium .. . . .	—	2	1	—	1	1	1
Total deaths .. . . .	1	2	2	1	2	2	4
Rate per 1,000 total births (live and still) .. . . .	0.14	0.29	0.28	0.14	0.29	0.30	0.58

**TABLE 2. Birth-rates, death-rates, analysis of mortality, maternal mortality and case-rates for certain infectious diseases in the year 1960**

*Supplied by the Registrar General*

(Provisional figures based on quarterly returns)

		<i>BRISTOL</i>		<i>ENGLAND &amp; WALES</i>
		Rates per 1,000 Home Population	Rates per 1,000 Total Births (Live & Still)	Rates per 1,000 Home Population
<b>Birth Registrations:</b>				
Live	.. .. .. .. .. .. ..	15.9		17.1*
Still	.. .. .. .. .. .. ..		14.5	19.8
<b>Death Registrations:</b>				
ALL CAUSES (Crude)	.. .. .. .. .. ..	12.13		11.5
(Adjusted)	.. .. .. .. .. ..	11.89		
Typhoid and paratyphoid fevers	.. .. .. .. .. ..	—		0.00
Whooping Cough	.. .. .. .. .. ..	—		0.00
Diphtheria	.. .. .. .. .. ..	—		0.00
Tuberculosis	.. .. .. .. .. ..	0.07		0.08
Influenza	.. .. .. .. .. ..	0.02		0.02
Smallpox	.. .. .. .. .. ..	—		—
Acute poliomyelitis (including polioencephalitis)	.. .. .. .. .. ..	—		0.00
Pneumonia	.. .. .. .. .. ..	0.5		0.53
<b>Notifications (Corrected):</b>				
Typhoid fever	.. .. .. .. .. ..	0.01		0.00
Paratyphoid	.. .. .. .. .. ..	—		0.00
Meningococcal infection	.. .. .. .. .. ..	0.01		0.01
Scarlet fever	.. .. .. .. .. ..	0.42		0.70
Whooping cough	.. .. .. .. .. ..	0.92		1.27
Diphtheria	.. .. .. .. .. ..	—		0.00
Erysipelas	.. .. .. .. .. ..	0.11		0.06
Smallpox	.. .. .. .. .. ..	—		—
Measles	.. .. .. .. .. ..	1.28		3.48
Pneumonia	.. .. .. .. .. ..	0.46		0.32
Acute poliomyelitis (including polioencephalitis):—				
Paralytic	.. .. .. .. .. ..	—		0.00
Non-paralytic	.. .. .. .. .. ..	—		0.00
Food poisoning	.. .. .. .. .. ..	0.42		0.17
Puerperal pyrexia	.. .. .. .. .. ..		11.59	
<i>Rates per 1,000 Live Births</i>				
		<i>Bristol</i>	<i>England &amp; Wales</i>	
Deaths under one year of age	.. .. .. .. .. ..		19.7	21.9†
Deaths from diarrhoea and enteritis (under 2 years of age)	.. .. .. .. .. ..		0.15	
<b>Maternal Mortality:</b>				
		<i>Rate per 1,000 Total Births (i.e., Live and Still)</i>		<i>Rate per Million Women aged 15 to 44</i>
		<i>No. Deaths</i>	<i>No. Deaths</i>	<i>(England &amp; Wales)</i>
		<i>BRISTOL</i>	<i>ENG. &amp; WALES</i>	
Maternal causes—excluding abortion	.. .. .. .. .. ..	—	242	0.30
Due to abortion	.. .. .. .. .. ..	1	0.14	68
Total maternal mortality	.. .. .. .. .. ..	1	0.14	310
			0.39	34

\* The provisional birth rate shown above for England and Wales is the highest since 1949.

† The provisional infant death rate for England and Wales is the lowest ever recorded in the country.

**TABLE 3. Total deaths of Bristol Citizens by cause and age registered during Calendar Year 1960**

Compiled from figures supplied by the Registrar General

	DISEASE	Sex	All ages	75 & over							
				0-	1-	5-	15-	45-	65-	75-	over
	All Causes .. .. .. ..	M	2,617	86	13	13	126	737	725	917	
		F	2,643	50	10	9	60	429	647	1,438	
1.	T.B. Respiratory .. .. .. ..	M	18	—	—	—	4	10	4	—	
		F	7	—	—	—	1	4	—	2	
2.	T.B. Other .. .. .. ..	M	2	—	—	—	2	—	—	—	
3.	Syphilitic Disease .. .. .. ..	M	8	—	—	—	—	5	3	—	
4.	Diphtheria .. .. .. ..	M	—	—	—	—	—	—	2	2	
5.	Whooping Cough .. .. .. ..	M	—	—	—	—	—	—	—	—	
6.	Meningococcal Infection .. .. .. ..	M	—	—	—	—	—	—	—	—	
		F	1	—	1	—	—	—	—	—	
7.	Acute Poliomyelitis .. .. .. ..	M	—	—	—	—	—	—	—	—	
		F	—	—	—	—	—	—	—	—	
8.	Measles .. .. .. ..	M	—	—	—	—	—	—	—	—	
		F	—	—	—	—	—	—	—	—	
9.	Other Infective and Parasitic Diseases .. .. .. ..	M	9	1	1	3	1	2	—	1	
		F	5	—	1	1	1	1	1	—	
10.	Malignant Neoplasm of Stomach .. .. .. ..	M	77	—	—	—	2	36	21	18	
		F	59	—	—	—	—	8	16	35	
11.	„ „ „ Lung, Bronchus .. .. .. ..	M	180	—	—	—	4	99	61	16	
		F	22	—	—	—	—	9	7	6	
12.	„ „ „ Breast .. .. .. ..	M	—	—	—	—	—	—	—	—	
		F	100	—	—	—	6	43	27	24	
13.	„ „ „ Uterus .. .. .. ..	M	42	—	—	—	—	1	23	11	7
14.	„ „ „ Other & Lymp. Neoplasms .. .. .. ..	M	234	—	1	2	15	68	70	78	
		F	208	1	1	—	10	68	56	72	
15.	Leukaemia, Aleukaemia .. .. .. ..	M	8	—	—	1	2	2	3	—	
		F	16	—	1	2	—	4	4	5	
16.	Diabetes .. .. .. ..	M	19	—	1	—	—	1	7	5	5
		F	28	—	—	—	—	1	3	10	14
17.	Vascular Lesions of Nervous System .. .. .. ..	M	308	—	—	—	5	65	89	149	
		F	534	—	—	—	9	46	153	326	
18.	Coronary Disease, Angina .. .. .. ..	M	576	—	—	—	17	203	200	156	
		F	399	—	—	—	1	68	132	198	
19.	Hypertension with Heart Disease .. .. .. ..	M	79	—	—	—	2	21	29	27	
		F	128	—	—	—	—	21	37	70	
20.	Other Heart Disease .. .. .. ..	M	259	—	—	1	5	32	59	162	
		F	422	—	—	—	5	41	69	307	
21.	Other Circulatory Disease .. .. .. ..	M	141	—	—	—	4	16	30	91	
		F	163	—	—	—	—	15	26	122	
22.	Influenza .. .. .. ..	M	4	—	—	—	—	2	—	2	
		F	—	—	—	—	—	3	2	1	
23.	Pneumonia (including Pneu. of Newborn) .. .. .. ..	M	93	17	2	—	3	18	13	40	
		F	6	—	—	—	1	3	15	87	
24.	Bronchitis .. .. .. ..	M	181	2	1	—	1	50	61	66	
		F	47	—	—	—	—	9	12	26	
25.	Other Diseases of Respiratory System .. .. .. ..	M	52	—	—	—	2	14	21	15	
		F	18	—	—	—	1	6	3	8	
26.	Ulcer of Stomach and Duodenum .. .. .. ..	M	26	—	—	—	1	8	6	11	
		F	16	—	—	—	2	3	11		
27.	Gastritis, Enteritis and Diarrhoea .. .. .. ..	M	8	1	1	—	1	3	—	2	
		F	22	—	—	—	1	2	7	12	
28.	Nephritis and Nephrosis .. .. .. ..	M	15	—	—	—	1	6	1	7	
		F	14	—	—	2	2	2	4	4	
29.	Hyperplasia of Prostate .. .. .. ..	M	33	—	—	—	—	—	10	19	
30.	Pregnancy, Childbirth, Abortion .. .. .. ..	M	1	—	—	—	1	—	—	—	
31.	Congenital Malformations .. .. .. ..	M	30	21	1	2	4	—	2	—	
		F	20	15	—	—	1	4	—	—	
32.	Other Defined and Ill-Defined Diseases .. .. .. ..	M	144	43	2	1	11	31	25	31	
		F	166	26	1	3	8	27	39	62	
33.	Motor Vehicle Accidents .. .. .. ..	M	43	—	1	1	23	7	3	8	
		F	12	—	1	1	2	2	3	3	
34.	All other Accidents .. .. .. ..	M	44	1	2	2	9	17	1	12	
		F	47	—	2	—	2	3	6	34	
35.	Suicide .. .. .. ..	M	25	—	—	—	5	11	8	2	
		F	17	—	—	—	4	11	2	—	
36.	Homicide and Operations of War .. .. .. ..	M	1	—	—	—	1	—	—	—	
		F	2	—	—	—	2	—	—	—	

**TABLE 4. Causes of death registered during Calendar Year 1960***Compiled from figures supplied by Registrar General*

<i>Death Rate per 1,000 Population</i>	<i>Disease</i>	<i>No. Deaths 1960</i>	<i>Per cent. of all Deaths</i>
.058	1. T.B. Respiratory .. .. ..	25	.48
.007	2. T.B. Other .. .. ..	3	.06
.028	3. Syphilitic disease .. .. ..	12	.23
—	4. Diphtheria .. .. ..	—	—
—	5. Whooping Cough .. .. ..	—	—
.002	6. Meningococcal infection .. .. ..	1	.02
—	7. Acute poliomyelitis .. .. ..	—	—
—	8. Measles .. .. ..	—	—
.032	9. Other infective and parasitic disease .. .. ..	14	.27
.314	10. Malignant neoplasm of stomach .. .. ..	136	2.59
.466	11. " " lung, bronchus .. .. ..	202	3.84
.231	12. " " breast .. .. ..	100	1.90
.097	13. " " uterus .. .. ..	42	.80
1.019	14. " other and lymph. neoplasms .. .. ..	442	8.40
.055	15. Leukaemia, aleukaemia .. .. ..	24	.46
.108	16. Diabetes .. .. ..	47	.89
1.941	17. Vascular lesions of nervous system .. .. ..	842	16.01
2.248	18. Coronary disease, angina .. .. ..	975	18.54
.477	19. Hypertension with heart disease .. .. ..	207	3.94
1.570	20. Other heart disease .. .. ..	681	12.95
.701	21. " circulatory disease .. .. ..	304	5.78
.023	22. Influenza .. .. ..	10	.19
.482	23. Pneumonia (including pneumonia of new-born) .. .. ..	209	3.97
.526	24. Bronchitis .. .. ..	228	4.33
.161	25. Other diseases of respiratory system .. .. ..	70	1.33
.097	26. Ulcer of stomach and duodenum .. .. ..	42	.80
.069	27. Gastritis, enteritis and diarrhoea .. .. ..	30	.57
.067	28. Nephritis and nephrosis .. .. ..	29	.55
.076	29. Hyperplasia of prostate .. .. ..	33	.63
.002	30. Pregnancy, childbirth, abortion .. .. ..	1	.02
.115	31. Congenital malformations .. .. ..	50	.95
.715	32. Other defined and ill-defined diseases .. .. ..	310	5.89
.127	33. Motor vehicle accidents .. .. ..	55	1.05
.210	34. All other accidents .. .. ..	91	1.73
.097	35. Suicide .. .. ..	42	.80
.007	36. Homicide and operations of war .. .. ..	3	.06
12.127	All Causes .. .. ..	5,260	

**TABLE 5. Deaths (corrected for transfers) occurring within the years 1959 and 1960 (Local figures)**

<i>International Code No.</i>			1959		1960	
			Total	Including	Total	Including
001-008	T.B. of respiratory system ..	.. .. .. ..	30		26	
010-019	T.B. other .. .. .. ..	4			3	
020-029	Syphilis and its sequelae .. .. .. ..	6			10	
030-039	Gonococcal infection and other V.D. .. .. .. ..	—			1	
040-049	Infectious disease in intestinal tract .. .. .. ..	1			1	
050-064	Other bacterial diseases .. .. .. ..	1			3	
070-074	Spirochaetal diseases (except syphilis) .. .. .. ..	—			—	
080-096	Diseases attributed to viruses .. .. .. ..	5			10	
100-108	Typhus and other rickettsial diseases .. .. .. ..	—			—	
110-117	Malaria .. .. .. ..	—			—	
120-138	Other infective and parasitic diseases .. .. .. ..	2			—	
140-148	Malignant neoplasm of buccal cavity and pharynx ..	21			12	
150-159	Malignant neoplasm digestive organs and peritoneum ..	375			352	
151	Malignant neoplasm stomach .. .. .. ..	151			137	
153	Malignant neoplasm large intestine (except rectum) .. .. .. ..	91			95	
154	Malignant neoplasm rectum .. .. .. ..	44			49	
160-165	Malignant neoplasm respiratory system .. .. .. ..	216			212	
170-181	Malignant neoplasm breast & genito-urinary system ..	256			258	
170	Malignant neoplasm breast .. .. .. ..	94			100	
171/4	Malignant neoplasm uterus .. .. .. ..	40			41	
175	Malignant neoplasm ovary, fallopian tube and broad ligament .. .. .. ..	25			31	
177	Malignant neoplasm prostate .. .. .. ..	37			28	
180/1	Malignant neoplasm kidney, bladder and other urinary organs .. .. .. ..	56			52	
190-199	Malignant neoplasm other and unspecified sites ..	58			57	
200-205	Neoplasms of lymphatic & haematopoietic tissues ..	51			53	
210-229	Benign neoplasm .. .. .. ..	3			8	
230-239	Neoplasm of unspecified nature .. .. .. ..	16			15	
240-245	Allergic disorders .. .. .. ..	10			9	
250-254	Diseases of thyroid gland .. .. .. ..	2			3	
260	Diabetes mellitus .. .. .. ..	33			44	
270-277	Diseases of other endocrine glands .. .. .. ..	3			1	
280-289	Avitaminoses, and other metabolic diseases .. .. .. ..	1			2	
290-299	Diseases of blood-forming organs .. .. .. ..	17			21	
300-309	Psychoses .. .. .. ..	4			6	
310-318	Psychoneurotic disorders .. .. .. ..	—			—	
320-326	Disorders of character, behaviour and intelligence ..	2			1	
330-334	Vascular lesions affecting central nervous system ..	811			853	
331	Cerebral haemorrhage .. .. .. ..	281			294	
332	Cerebral embolism and thrombosis .. .. .. ..	396			433	
340-345	Inflammatory diseases of central nervous system ..	8			17	
350-357	Other diseases of central nervous system .. .. .. ..	39			33	
360-369	Diseases of nerves and peripheral ganglia .. .. .. ..	2			—	
370-379	Inflammatory diseases of eye .. .. .. ..	—			—	
380-389	Other diseases and conditions of eye .. .. .. ..	—			—	
390-398	Diseases of ear and mastoid process .. .. .. ..	—			1	
400-402	Rheumatic fever .. .. .. ..	—			—	
410-416	Chronic rheumatic heart disease .. .. .. ..	83			96	
420-422	Arteriosclerotic and degenerative heart disease ..	1410			1467	
420	Arteriosclerotic heart disease, including coronary disease .. .. .. .. ..	834			972	
422	Other myocardial degeneration .. .. .. .. ..	546			462	
430-434	Other diseases of the heart .. .. .. .. ..	76			106	
440-447	Hypertensive disease .. .. .. .. ..	273			265	
440/3	Hypertensive heart disease .. .. .. .. ..	234			231	
450-456	Disease of arteries .. .. .. .. ..	169			224	
460-468	Diseases of veins and other diseases of circulatory system .. .. .. .. ..	49			41	

**TABLE 5—continued**

<i>International Code No.</i>			<i>1959</i>		<i>1960</i>	
			<i>Total</i>	<i>Including</i>	<i>Total</i>	<i>Including</i>
470-475	Acute upper respiratory infections	..	..	—	1	
480-483	Influenza	..	..	77	9	
490-493	Pneumonia (4 weeks plus)	..	..	197	187	
500-502	Bronchitis	..	..	264	226	
510-527	Other diseases of respiratory system	..	..	47	63	
530-539	Diseases of buccal cavity and oesophagus	..	..	1	3	
540-545	Diseases of stomach and duodenum	..	..	23	44	
550-553	Appendicitis	..	..	4	6	
560-561	Hernia of abdominal cavity	..	..	16	11	
570-578	Other diseases of intestines and peritoneum	..	..	29	45	
580-587	Diseases of liver, gallbladder and pancreas	..	..	19	35	
590-594	Nephritis and nephrosis	..	..	32	29	
600-609	Other diseases of urinary system	..	..	39	25	
610-617	Diseases of male genital organs	..	..	25	31	
620-626	Diseases of breast, ovary, fallopian tube and para- metrium	..	..	1	—	
630-637	Diseases of uterus and other female genital organs	..	..	—	—	
640-649	Complications of pregnancy	..	..	—	—	
650-652	Abortion	..	..	—	1	
660	Delivery without complication	..	..	—	—	
670-678	Delivery with specified complication	..	..	2	—	
680-689	Complications of the puerperium	..	..	—	—	
690-699	Infections of skin and subcutaneous tissue	..	..	2	—	
700-716	Other diseases of skin and subcutaneous tissue	..	..	5	1	
720-727	Arthritis and rheumatism, except rheumatic fever	..	..	20	16	
730-738	Osteomyelitis and other diseases of bone and joint	..	..	5	3	
740-749	Other diseases of musculoskeletal system	..	..	—	1	
750-759	Congenital malformations	..	..	50	51	
760-769	Birth injuries, asphyxia and infections of newborn	..	..	35	20	
762	Postnatal asphyxia and atelectasis	..	..	9	3	
763	Pneumonia of the newborn	..	..	5	2	
770-776	Other diseases peculiar to early infancy	..	..	37	49	
780-789	Symptoms referable to systems or organs	..	..	7	8	
790-795	Senility and ill-defined diseases	..	..	14	10	
E800-802	Railway accidents	..	..	3	1	
E810-825	Motor vehicle traffic accidents	..	..	56	59	
E830-835	Motor vehicle non-traffic accidents	..	..	—	—	
E840-845	Other road vehicle accidents	..	..	—	1	
E850-858	Water transport accidents	..	..	4	1	
E860-866	Aircraft accidents	..	..	1	1	
E870-888	Accidental poisoning by solid and liquid substances	..	..	—	1	
E890-895	Accidental poisoning by gases and vapours	..	..	16	9	
E900-904	Accidental falls	..	..	44	44	
E910-936	Other accidents	..	..	24	19	
E940-946	Complications due to nontherapeutic medical and surgical procedures	..	..	—	—	
E950-959	Therapeutic misadventure and late complications of therapeutic procedures	..	..	1	—	
E960-965	Late effects of injury and poisoning	..	..	—	—	
E970-979	Suicide and self-inflicted injury	..	..	39	45	
E980-985	Homicide and injury purposely inflicted by other persons	..	..	2	4	
E990-999	Injury resulting from operations of war	..	..	—	—	
		<b>TOTALS</b>	..	5178	5271	

**TABLE 6. Notifiable cases during 1960 (including Port Cases) Local figures**  
(During Calendar year)

Notifiable Diseases	Notifications										Deaths (corrected for transfers) not necessarily relevant to notifications of 1960										
	At ages—years:					At ages—years:					Notified in each quarter					Deaths—years:					
	All ages	Under 1	1 to 4	5 to 14	15 to 24	25 to 44	45 to 64	65 and upwards	No.	%	1st	2nd	3rd	4th	Under 1	1 to 4	5 to 14	15 to 44	45 to 64	65 and upwards	
Diphtheria	...	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Erysipelas	...	...	...	...	...	46	—	1	3	2	5	29	6	6	13	17	10	8	11	0·11	—
Scarlet fever	...	...	...	...	...	182	1	56	120	5	—	—	32	18	68	33	41	40	0·42	—	—
Paratyphoid	...	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Typhoid	...	...	...	...	...	2	—	—	1	1	—	—	2	100	—	1	1	—	0·01	—	
Meningococcal infection	...	...	...	...	...	4	2	2	—	—	—	—	4	100	3	—	1	0·01	1	—	
Poliomyelitis (including polioencephalitis)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pneumonia (excluding pneumonia of new born)	...	...	203	18	22	20	10	30	53	50	91	45	100	46	21	36	0·47	187	23	3	
Malaria	...	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Dysentery	...	...	...	...	...	699	17	226	229	67	110	39	11	34	5	349	216	36	98	1·61	—
Acute infectious encephalitis	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	1	
Puerperal pyrexia (City cases only)	...	...	...	...	...	104	—	—	30	61	—	—	—	21	24	20	26	—	—	—	
Ophthalmia neonatorum	...	...	3	3	—	—	—	—	—	—	2	67	2	—	1	—	—	—	—	—	
Measles	...	...	...	...	...	556	17	259	279	1	—	—	7	1	29	68	135	324	1·28	—	
Whooping cough	...	...	...	...	...	398	37	191	167	1	2	—	28	7	53	42	140	163	0·92	—	
Acute rheumatism (to 15 years)	...	...	27	—	2	22	3	—	—	—	20	74	7	9	8	3	—	—	—	—	
Food poisoning	...	...	184	17	26	37	35	26	8	27	15	13	44	97	30	0·42	1	1	—	—	
Infective hepatitis	...	...	120	—	13	70	16	13	17	1	—	—	—	—	—	—	—	120	—	3	
Glandular fever	...	...	12	—	2	4	6	—	—	1	†	—	—	—	—	—	—	12	—	—	

\* 16 cases occurred at home of which 2 were subsequently removed to hospital.

† *Infective hepatitis* { January—November (inclusive) 1960.      { 71 and December 1st official notifications (as in table above) commenced.      { *Glandular fever* { voluntary notifications.—No deaths were directly attributed to puerperal pyrexia.

**TABLE 7. Tuberculosis Notifications in Bristol**

CASES																		
			At	Un-	Sex	All	der	1-	5-	10-	15-	20-	25-	35-	45-	55-	65	and
					Ages	one												over
<b>1960—</b>																		
<b>Pulmonary Tuberculosis</b>																		
New notifications	..	..	M	141	2	2	4	11	2	7	7	25	15	27	26	15		
			F	57	—	3	3	2	4	11	15	9	4	2	2	4		
Transfers from other areas	..	..	M	44	—	1	—	1	3	9	8	8	10	3	1	1	1	
			F	23	—	—	—	1	1	5	10	3	1	1	1	1		
Deaths mentioning Tuberculosis, not notified	..	..	M	4	—	—	—	—	—	—	—	—	—	1	1	2		
			F	1	—	—	—	—	—	—	—	—	—	—	—	—	1	
<b>1960—</b>																		
<b>Non-pulmonary Tuberculosis</b>																		
New notifications	..	..	M	10	—	—	—	3	3	—	3	1	—	2	1	2	2	
			F	17	—	1	2	—	1	—	3	3	2	1	1	2	2	
Transfers from other areas	..	..	M	—	—	—	—	—	—	—	—	—	—	1	—	—	—	
			F	1	—	—	—	—	—	—	—	—	—	—	—	—	—	
Deaths mentioning Tuberculosis, not notified	..	..	M	—	—	—	—	—	—	—	—	—	—	1	—	—	—	
			F	1	—	—	—	—	—	—	—	—	—	—	—	—	—	
<b>New Notifications—</b>																		
<b>Pulmonary—</b>																		
1959	..	..	M	148	1	1	3	3	8	6	26	21	27	40	12			
			F	71	—	1	3	3	11	11	15	14	7	3	3			
1958	..	..	M	173	—	3	1	7	12	12	27	27	36	34	14			
			F	98	—	4	2	5	13	17	21	12	11	5	8			
1957	..	..	M	187	1	—	4	2	18	16	40	27	34	28	17			
			F	114	2	1	2	3	15	24	37	15	10	4	1			
1956	..	..	M	191	—	4	10	3	15	21	29	21	39	32	17			
			F	113	—	4	4	5	16	20	25	19	12	5	8			
1955	..	..	M	201	2	3	9	6	14	15	36	35	27	36	18			
			F	147	—	3	3	3	26	24	47	21	8	5	7			
1954	..	..	M	218	2	4	11	4	24	21	42	25	46	24	15			
			F	168	—	2	9	11	34	27	45	24	8	2	6			
1953	..	..	M	239	—	10	14	4	21	26	43	29	46	30	16			
			F	185	—	7	6	11	20	38	42	29	17	7	8			
1952	..	..	M	266	—	8	11	6	23	35	49	39	39	37	19			
			F	214	—	6	5	16	41	36	61	29	8	7	5			
1951	..	..	M	296	1	11	10	9	28	43	50	45	58	29	12			
			F	208	—	9	10	9	31	51	47	18	15	10	8			
1950	..	..	M	223	2	11	10	7	27	16	44	36	34	30	6			
			F	205	—	9	12	9	40	48	43	19	12	11	2			
<b>Non-Pulmonary—</b>																		
1959	..	..	M	23	—	2	1	1	2	2	4	3	3	2	2	3		
			F	24	—	1	1	—	3	4	3	2	1	3				
1958	..	..	M	15	—	3	—	1	—	3	4	1	2	1	—	4		
			F	21	—	1	—	1	2	3	7	2	1	—	4			
1957	..	..	M	13	—	—	1	3	1	1	5	—	—	2	—	2	—	
			F	23	—	2	3	1	3	1	5	3	2	1	2	—	2	
1956	..	..	M	28	—	2	2	4	1	4	4	3	2	5	1	2	2	
			F	20	—	—	1	2	1	—	6	3	3	3	2	2	2	
1955	..	..	M	19	—	—	2	—	1	3	5	3	2	2	2	1	1	
			F	27	—	3	4	—	7	5	3	2	1	1	1	—	3	
1954	..	..	M	19	—	2	4	1	2	2	4	—	1	—	1	—	3	
			F	30	—	2	—	2	5	6	11	—	—	1	—	1	3	
1953	..	..	M	16	1	5	—	—	3	2	2	1	1	1	—	—	1	
			F	22	—	2	1	—	6	5	3	4	—	—	1	—	1	
1952	..	..	M	24	—	2	5	3	3	2	2	3	2	2	2	2	—	
			F	30	—	6	3	—	1	3	6	7	3	2	—	1	1	
1951	..	..	M	26	1	4	2	1	3	2	3	2	3	2	4	1	—	
			F	25	2	1	3	4	3	4	6	—	—	—	2	4	1	
1950	..	..	M	29	2	3	7	3	2	2	4	4	2	—	—	—	—	
			F	22	—	6	1	2	2	2	3	5	—	1	—	—	—	

**TABLE 8. Tuberculosis in Bristol—Deaths**

(Registrar General's corrected figures)

## PULMONARY TUBERCULOSIS—

Year	Sex	At All Ages	Under One	1-	5-	15-	45-	65 and over
1960	M	18	—	—	—	4	10	4
	F	7	—	—	—	1	4	2
1959	M	18	—	—	—	5	9	4
	F	9	—	—	—	1	6	2
1958	M	22	—	—	—	2	9	11
	F	15	—	—	—	4	3	8
1957	M	23	—	—	—	3	9	11
	F	8	—	—	—	4	3	1
1956	M	23	—	—	—	4	13	6
	F	14	—	—	—	8	2	4
1955	M	38	—	—	—	11	19	8
	F	14	—	—	—	8	2	4
1954	M	41	—	—	—	12	23	6
	F	26	—	—	—	13	9	4
1953	M	61	—	—	—	24	28	9
	F	32	—	—	—	16	9	7
1952	M	62	1	—	—	20	31	10
	F	29	—	—	—	13	10	6
1951	M	83	—	—	1	27	43	12
	F	67	—	—	1	39	20	7
1950	M	89	—	1	—	28	47	13
	F	93	—	2	—	55	28	8

## NON-PULMONARY TUBERCULOSIS—

1960	M	2	—	—	—	2	—	—
	F	1	—	—	—	—	1	—
1959	M	3	—	—	—	—	2	1
	F	2	—	—	—	—	—	2
1958	M	4	—	—	—	4	—	—
	F	6	—	1	—	—	3	2
1957	M	2	—	—	1	—	1	—
	F	3	—	—	—	—	1	2
1956	M	5	—	1	1	1	1	1
	F	1	—	—	—	—	—	1
1955	M	3	—	—	—	1	2	—
	F	4	—	—	1	1	—	2
1954	M	3	—	1	1	—	1	—
	F	4	—	1	—	3	—	—
1953	M	6	—	3	—	2	—	1
	F	6	—	1	1	1	2	1
1952	M	5	—	—	1	2	1	1
	F	6	—	1	—	2	1	2
1951	M	10	1	2	1	3	3	—
	F	4	—	1	—	2	1	—
1950	M	14	1	2	1	2	7	1
	F	5	—	1	1	1	1	1

**TABLE 9. Infant Mortality (Corrected for transfers)**

**Deaths 1960 (Local figures)**  
**(Occurring within Calendar Year)**

1959	Cause of Death	Total 1960	First day	From one day under one week	From one week to four weeks	Total under four weeks	Total from one month to under twelve months
—	T.B. respiratory .. ..	—	—	—	—	—	—
—	Meningococcal meningitis ..	—	—	—	—	—	—
—	Acute poliomyelitis .. ..	—	—	—	—	—	—
—	Whooping cough .. ..	—	—	—	—	—	—
—	Measles .. .. ..	—	—	—	—	—	—
11	Pneumonia (four weeks plus) ..	23	—	—	—	—	23
5	Pneumonia of the newborn ..	2	1	—	1	2	—
—	Influenza .. .. ..	—	—	—	—	—	—
2	Bronchitis .. .. ..	2	—	—	—	—	2
1	Gastro-enteritis (four weeks plus) ..	1	—	—	—	—	1
36	*Congenital malformations ..	36	11	7	10	28	8
19	*Birth injury .. .. ..	15	4	10	—	14	1
9	*Atelectasis .. .. ..	3	2	1	—	3	—
3	*Haemolytic disease of newborn ..	3	2	1	—	3	—
—	Haemorrhagic disease of newborn ..	4	1	3	—	4	—
7	*Other diseases of early infancy ..	7	2	5	—	7	—
29	*Immaturity (unqualified) .. ..	35	20	15	—	35	—
9	Other causes .. .. ..	7	—	2	1	3	4
131	TOTALS .. .. ..	138	43	44	12	99	39
	Rate per 1,000 live births registered in 1960 ..	20	6·2	6·4	1·7	14·4	5·7
Year 1959	TOTALS .. .. ..	131	44	39	11	94	37
	Rate per 1,000 live births registered ..	19·66	6·60	5·85	1·65	14·11	5·55

\* Where there has been mention of immaturity— { 1960—Bristol cases—55  
 { During 1959—Bristol cases—55

Infant Deaths in:—	Hospitals .. ..	115 (including 5 in hospitals outside City area)
	Nursing Homes .. ..	—
	Private Residences .. ..	23
	Total .. ..	<u>138</u>



## PREVALENCE AND CONTROL OF INFECTIOUS DISEASES

Dr. P. W. BOTHWELL

(*Senior Medical Officer—Epidemiology*)

### General

Last year reference was made to the higher prevalence of non-notifiable virus diseases. In 1960, as a result of an outbreak of infective hepatitis in the City with some concurrent infectious mononucleosis (Glandular Fever), both diseases were made statutorily notifiable in Bristol. Notification of these and other diseases is an essential first step in research into their incidence—a simple step no doubt but without it no further research is possible in the "population" or epidemiologic sense.

### Incidence of Infectious Diseases and other Diseases

#### NOTIFICATIONS

*1st January to 31st December, 1960*

*Infective hepatitis (Officially notifiable 1st December, 1960 (120) .....	1,146
*Glandular fever (Officially notifiable 1st December, 1960 (12) .....	83
Poliomyelitis (including polioencephalitis) .....	Nil
Diphtheria .....	Nil
Erysipelas .....	46
Scarlet Fever .....	182
Paratyphoid .....	Nil
Typhoid .....	2
Meningococcal infection .....	4
Acute primary pneumonia .....	194
Acute influenzal pneumonia .....	9
Malaria .....	Nil
Dysentery .....	699
Measles .....	556
Whooping cough .....	398
Acute rheumatism (under 16 years of age) .....	26
Food poisoning .....	184
Puerperal pyrexia (citizens only) .....	81
	(102 in full)
Ophthalmia neonatorum .....	3
Tuberculosis Pulmonary <i>Primary only</i> .....	198
,, Non-pulmonary „ .....	27
TOTAL CASES .....	3,838

\*Infective hepatitis and glandular fever voluntarily notified from 1st January, 1960 and officially notified from 1st December, 1960.

### Virus Diseases

#### Infective Hepatitis and Mononucleosis

In the autumn of 1959, attention was drawn by School Welfare Officers to the apparently raised incidence of jaundice as a cause of school absence. Infective hepatitis was not then statutorily notifiable in Bristol. Voluntary notification by general practitioners was requested from the 1st January, 1960, and information from this and other sources showed that there were indeed many cases.

The tables on page 23 show the number of cases notified month by month, and the age groups involved, the greatest prevalence being in primary school children.

The earliest cases about which information was obtained retrospectively occurred in a mental deficiency hospital on the periphery of the City in July 1959. The evidence which subsequently came in about the disease showed that the majority of cases in the latter half of 1959 were in the central districts of the City, but in the course of the first few months of 1960 there was a centrifugal spread, and during 1960 cases have been scattered throughout the City, with concentrations in two peripheral wards.

The incubation period appeared to be usually in the region of a month. Visits to the homes of notified patients by doctors showed that notified cases are probably only a proportion of the total incidence, as it was found that other patients have had some form of coincident illness, sometimes with jaundice, which has not been notified, and it is probable that we have not recorded the total outbreak. The reported cases reached their highest monthly level in October and November but there were some signs that they were diminishing in December.

Cases of mononucleosis have also been occurring in the City in the past few months and this disease also became notifiable on 1st January, 1960. Several cases admitted to hospital as infective hepatitis have subsequently been diagnosed as mononucleosis with jaundice. Consequently an effort has been made to obtain serum from notified hepatitis cases to exclude the possibility that they were mononucleosis with jaundice, but so far no such cases have been demonstrated.

Gamma-globulin protection was offered to pregnant women exposed to the infection and to the teaching staff in "infected" schools, but so far has not been used as a means of controlling the outbreak in general, and there appears little doubt that the infection was widespread even when we began to hear about it.

Two deaths have occurred in children. Seventy-four cases of infective hepatitis were admitted to hospital in 1960, and 24 cases of mononucleosis.

No relationship has been shown between this extensive outbreak of infective hepatitis and immunising procedures in the preceding months.\*

So far as we know, the outbreak in Bristol represents a real increase in cases and we understand that similar increases in incidence have been noted in Sheffield and to some extent in Leeds. No rise in cases has been recorded, however, in those parts of England in which infective hepatitis is normally statutorily notifiable.

The recording and investigation of the Bristol outbreak continues.

Infective hepatitis and mononucleosis were made officially notifiable in Bristol from 1st December, 1960.

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\* The Department has its own sterile syringe service for injections given anywhere other than the smaller clinics.

<i>Infective Hepatitis</i>		
<i>Month</i>	<i>Cases notified</i>	<i>Quarterly totals</i>
January ..	46	
February ..	38	
March ..	44	128
April ..	59	
May ..	111	
June ..	98	268
July ..	100	
August ..	75	
September ..	121	296
October ..	165	
November ..	169	
December ..	136	470
		<hr/>
		1,162

*AGE GROUPS*

Pre-school ..	..	83
5—10 years ..	..	618
11—15 years ..	..	199
Over 15 ..	..	262
		<hr/>
		1,162

*Infective Mononucleosis*

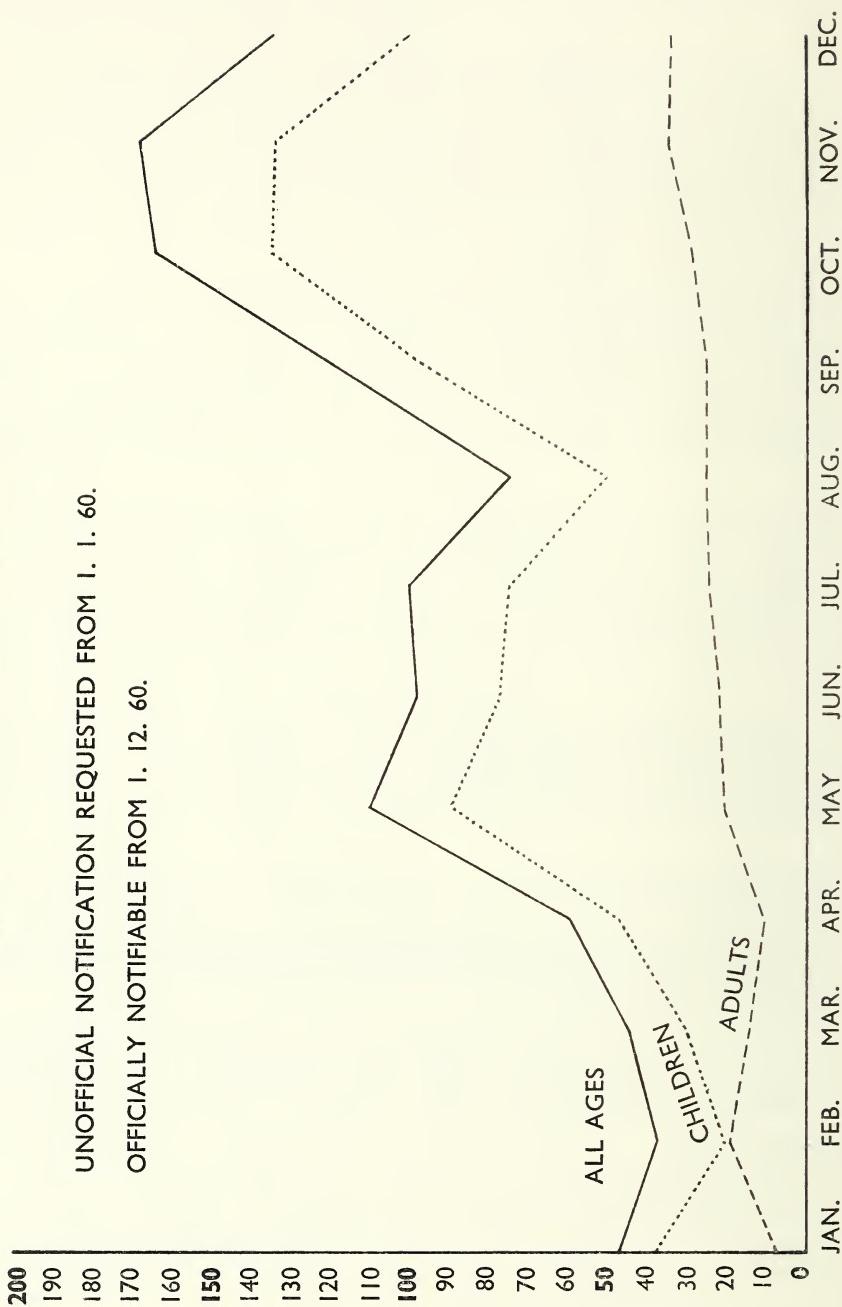
Pre-school ..	..	7
5—10 years ..	..	20
11—15 years ..	..	15
Over 15 ..	..	34
		<hr/>
		76

*Poliomyelitis*

There were no cases in Bristol in 1960. At 31st December, 1960, the proportion of the population immunised against the disease by the Salk vaccine by injection was as follows:—

<i>Age Groups</i>	<i>0—15</i>	<i>0—16</i>	<i>Birth years Pre 1933</i>	<i>Totals to date</i>
	<i>Birth years 1946—1960</i>	<i>Birth years 1933—1947</i>		<i>Inception (May 1956)—of Scheme to end 1960</i>
Primary Course completion	(82%) 81,085	53,203	22% 18,968	153,256
Boosters	(61%) 60,687	39,557	14% 7,992	108,236

A  
INFECTIVE HEPATITIS IN BRISTOL — 1960



### *Measles*

The 556 measles cases were distributed throughout the population in the following ways in 1960:—

<i>Age Group</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Under 1	10	7	17
1—2	22	22	44
2—3	31	34	65
3—4	34	41	75
4—5	36	39	75
5—10	130	134	264
10—15	9	6	15
Over	—	1	—
<b>TOTALS</b>	<b>272</b>	<b>284</b>	<b>556</b>

There were no deaths attributable to measles.

### *Virus Meningitis*

Between the 9th September and the 13th November, 1960, 25 people were admitted to hospital because of meningeal symptoms. Seven of these patients were adults and the rest children. Six members of one family were involved and two and three of another two families. E.C.H.O. 9 virus was isolated from four children. In eighteen other patients who submitted stool specimens, no isolation of a virus was made. The symptoms were febrile and meningeal and spontaneous recovery was the rule within twenty-four to thirty-six hours with the exception of one fatal case in a child of sixteen months. This case was, however, located in a different area of the City from the other cases which were grouped in one particular area.

## **Bacterial Diseases**

### *Food Poisoning (General)*

The 184 cases notified (compared with 182 in 1959) consisted of 61 confirmed single cases and 19 "outbreaks", i.e. more than one person involved. Two outbreaks are recorded as follows:

#### (1) *Probable food poisoning from cheese*

Food poisoning symptoms were reported in the caretaker and his wife at a Children's Hostel in Mangotsfield. Investigation suggested cheese as the likely agent and samples remaining uneaten were submitted to the Public Health Laboratory, Bristol, where a "profuse growth of *staph. aureus* was isolated", with a surface viable count of 30 million *staph. aureus* per gram, probably the cause of the symptoms of food poisoning associated with the consumption of this cheese". The cheese was New Zealand rindless Cheddar and 7 samples of similar brand were secured from the wholesale supplier, with the following report: "All these samples contained *staph. aureus* in quantity but phage typing has shown that they are different from that strain which gave rise to illness in the recent incident." "These cheeses may be regarded as safe."

#### 2. *Outbreak of Salmonella Infection in Southmead Hospital in July 1960 involving 11 people*

Between 18th July and 20th July, 8 nursery babies were noted to have loose stools and prophylactic streptomycin was given to both sick and well babies in the nursery and prophylactic sulphonamides to the adult patients when an unidentified *Salmonella* was grown from the stools. The organism was identified on 22nd July as *S. brandenburg* and an ante-natal patient was found to be excreting *S. typhimurium*.

By 23rd July, one of the originally affected babies became seriously ill and died 24 hours later despite intensive antibiotic therapy—autopsy confirming the diagnoses of *S. brandenburg* septicaemia.

At a subsequent Cross Infection Committee attended by the Medical Officer of Health and his Deputy, it was decided to empty the affected ward, which was closed and disinfected.

All staff and domestics submitted three stool specimens. A night nurse on the affected ward was found to be a symptomless excretor of *S. brandenburg* and it was thought that feeds in the relevant incubation period had been contaminated by this source. A doctor, 3 nurses and a ward orderly were found between them to be excretors of *S. arizona*, *S. butantan*, *S. heidelberg*, *S. saint paul* and one unidentified *Salmonella*, while a sick baby was found to be excreting *S. kiambu*.

The affected ward was opened on the 4th August, also another ward which had been closed as a precautionary measure when a nurse was found to be excreting a *Salmonella* which was subsequently found to be *Salmonella butantan*.

The mother of one of the first babies affected who herself was found to be excreting *Salmonella brandenburg* took her own discharge against medical advice, infected her five other children and all the members (mother, father and three children) of a family sharing the house.

It was reported that this mother suffered from diarrhoea about a month before admission to hospital.

*Salmonella brandenburg* was isolated in the Bristol Public Health Laboratory on the 2nd July from specimens submitted by a student in the City whose symptoms began on the 26th June and from an elderly lady living in the City with symptoms starting on the 29th June. No definite source of infection or contact with any of the Southmead Hospital patients was found.

#### *Particulars of Outbreaks (in form of Ministry Return)*

Agent	No. of outbreaks Family outbreaks	No. of outbreaks Other outbreaks	No of cases Notified	No of cases Otherwise ascertained	Total No. of cases
<i>Agent identified</i>					
(a) Chemical poisons (Type to be stated)	—	—	—	—	—
(b) <i>Salmonella</i> (Type to be stated)					
<i>Salmonella saint paul</i>	1	—	4	—	4
,, <i>typhi-murium</i>	1	—	2	—	2
,, <i>enteritidis</i>	1	—	2	—	2
,, <i>thompson</i>	1	—	2	—	2
,, <i>brandenburg</i>	1	1	28	—	28
(c) <i>Staphylococci</i> (including toxin)	2	—	4	—	4
(d) <i>Cl. botulinum</i>	—	—	—	—	—
(e) <i>Cl. welchii</i>	—	—	—	—	—
(f) Other bacteria (to be named)	—	—	—	—	—
TOTALS	7	1	42	—	42
Agent not identified	11	—	32	—	32

*Particulars of Single Cases*

Agent	No. of cases		Total No. of cases
	Notified	Otherwise ascertained	
<b>Agent identified</b>			
(a) Chemical poisons (type to be stated)	—	—	—
(b) <i>Salmonella</i> (type to be stated)			
<i>Salmonella brandenburg</i>	4	—	4
,, <i>typhi-murium</i>	29	3	32
,, <i>saint paul</i>	4	1	5
,, <i>enteritidis</i>	3	—	3
,, <i>heidelberg</i>	3	—	3
,, <i>thompson</i>	2	—	2
,, <i>give</i>	2	—	2
,, <i>newport</i>	2	—	2
,, <i>anatum</i>	2	—	2
,, <i>hiroshima</i>	1	—	1
,, <i>montevideo</i>	1	—	1
,, <i>worthington</i>	1	—	1
(c) Staphylococcal (including toxin)	2	—	2
(d) <i>Cl. botulinum</i>	—	—	—
(e) <i>Cl. welchii</i>	1	—	1
(f) Other bacteria	—	—	—
<b>TOTALS</b>	<b>57</b>	<b>4</b>	<b>61</b>
Agent not identified	53	4	57

*Food Poisoning 1960*

(a) <i>Food Poisoning Notifications as returned to Registrar General (Corrected)</i>			
1st Quarter—13	2nd Quarter—44	3rd Quarter—97	4th Quarter—30
		TOTAL—184	
<b>(b) Cases Otherwise Ascertained as returned to Registrar General</b>			
1st Quarter—Nil	2nd Quarter—3	3rd Quarter—3	4th Quarter—2
		TOTAL—8	
<b>(c) Symptomless Excretors as returned to Registrar General</b>			
1st Quarter—Nil	2nd Quarter—Nil	3rd Quarter—Nil	4th Quarter—Nil
		TOTAL—Nil	
<b>(d) Fatal Cases as returned to Registrar General</b>			
1st Quarter—Nil	2nd Quarter—Nil	3rd Quarter—1	4th Quarter—Nil
		TOTAL—1	

*Notified Cases of Typhoid in Bristol during 1960*

Sex	Age	TYPHOID	
			Comments
M	38		A seaman from M/V "Javanese Prince". Reported sick with malaise and fever. Admitted to Ham Green Hospital. <i>S. typhi</i> isolated from faeces. M.O.H. of next port of call informed. No information concerning the source of the infection was received.
M	18		A trainee chemist at a City chemical works, handling typhoid organisms. Admitted to Ham Green Hospital. <i>S. typhi</i> confirmed. All members of his family were cleared.

*Dysentery*

Of 699 notifications, 440 cases were confirmed; these being almost double the number in 1959. In December only 3 cases were confirmed but in March there were 117.

The number of confirmed cases might well have been higher had all those invited to do so submitted faeces specimens.

From the St. George, Redfield and Barton Hill areas there were 117 cases and 90 from Knowle West, Hartcliffe and Withywood.

Over 80 confirmed cases occurred in nursery schools or day nurseries. Hotwells Day Nursery, Speedwell Nursery School and Monks Park Day Nursery were the chief victims.

*Notifications in months**Age and Sex Distribution*

			<i>M.</i>	<i>F.</i>	<i>Total</i>
January	..	..	71	Under 1	10
February	..	..	119	1—1 & 11/12	29
March	..	..	168	2—4	89
April	..	..	105	5—9	82
May	..	..	56	10—14	37
June	..	..	46	15—19	18
July	..	..	9	20—29	18
August	..	..	17	30—39	31
September	..	..	11	40—49	15
October	..	..	42	50—59	8
November	..	..	49	60—69	5
December	..	..	6	70+	5
			All ages	348	351
					699

Total Notifications = 699

No. proved positive = 440

**Comments on the Notified Diseases, 1960***Diphtheria*

Outbreaks of diphtheria in other parts of the country were headline news in 1960. No cases have occurred in Bristol since 1949 (when four cases were notified). It is perhaps useful to recall the incidence of diphtheria in Bristol in the past as in the following table of cases and deaths.

*Deaths and Cases*

Year	No. Cases Notified	No.	Under 1	Deaths				
				Age Grouping (years)	1—4	5—14	15—44	45—
1949	4	—	—	—	—	—	—	—
1948	18	—	—	—	—	—	—	—
1947	46	—	—	—	—	—	—	—
1946	38	3	—	—	2	3	1	—
1945	79	4	—	1	—	—	—	—
1944	161	2	—	1	—	—	1	—
1943	378	5	1	1	2	1	—	—
1942	370	7	—	2	5	—	—	—
1941	529	20	1	9	7	2	1	—
1940	784	15	—	6	7	1	1	—
1939	619	25	—	14	11	—	—	—
1938	647	22	2	4	15	1	—	—
1937	315	10	—	4	5	1	—	—

As is common elsewhere, the proportion of children immunised against this disease had fallen below the terms required for protection in the population.

A special diphtheria immunisation effort was therefore begun in November 1960 and was concentrated in the schools. All school children were given an explanatory leaflet and consent form and by the end of the year (2 months) 4,940 children had been given the requisite reinforcing dose while the first and second injections of three-injection primary courses were likewise under way. (For the whole of 1960, the number of primary diphtheria immunisation (all combinations of injections) courses actually completed by school children was 609 out of a full total (under 15) 6,315. The inclusive booster figure of school children was 8,358 out of a full total (all ages under 15) 9,634).

The immunity indices over the past 10 years have been as follows.

### *Immunity Index*

Age on 31.12 (i.e. born in year)

Year	Under 1 year of age	1 year to 4 years	5 years to 14 years	Total under 15 years of age
1953	3·4	57·9	38·9	41·8
1954	10·3	62·5	36·1	41·6
1955	8·1	62·4	37·3	42·1
1956	11·3	61·6	31·8	38·3
1957	14·7	62·5	31·0	38·1
1958	22·5	63·8	27·3	36·4
1959	26·3	66·5	22·2	34·2
1960	28·9	71·3	29·5	40·7
1960	6,550	26,750	65,900	99,200—Child population, figures as estimated by R.G.

The Ministry D.I.I. Return (annually) requires . . . "Number of children in Local Health Authority area on 31st December who have completed a course of diphtheria immunisation at any time 1st January, 1946 and 31st December, 1960" . . . (that is, as was required for 1960 period).

Section "A" to show . . . "Number of children whose last course (primary or booster) was completed in the period . . . "LAST FIVE YEARS

Section "B" To show . . . "Number of children whose last course (primary or booster) was completed in the period . . . "ANY-TIME PREVIOUS TO 5 YEARS ABOVE

Section "C" To show . . . "Estimated mid-year child population"

The IMMUNITY INDEX is obtained by taking Section "A" (above), the number of children, whose last course has been completed within the past five years, as a percentage of the child population within the respective groups ("C")

Thus the formula  $\frac{A}{C} \times 100 =$  The Immunity Index

### *Scarlet Fever*

The anomaly of notifying scarlet fever but not the equally important streptococcal throat continued in 1960. Notification of scarlet fever and streptococcal infection of the throat or upper respiratory tract, might stimulate early diagnosis for the sore throats of streptococcal origin which presage an attack of acute rheumatism. The latter is a notifiable disease in Bristol in view

of its implications for rheumatic heart disease. It is the detection of the streptococcal throat that is necessary in the first instance and such an arrangement might assist in establishing areas of endemic streptococcal infection. The current notification of scarlet fever, as has been pointed out for many years, is practically useless.

#### *Acute Rheumatism*

Cases since notification began have been distributed yearly as follows:—

#### *Rheumatic Fever*

Year	Cases Notified			Cases confirmed		
	Male	Female	Total	Male	Female	Total
1947	14	16	30	9	12	21
1948	28	40	68	23	23	46
1949	23	34	57	20	25	45
1950	9	20	29	8	15	23
1951	17	13	30	14	9	23
1952	16	26	42	13	23	36
1953	31	20	51	19	15	34
1954	12	28	40	11	20	31
1955	16	8	24	13	3	16
1956	15	9	24	9	7	16
1957	12	18	30	10	12	22
1958	16	19	35	13	15	28
1959	11	16	27	8	13	21
1960	16	16	32	11	15	26
Totals						
1947—60 inclusive (14 years)	236	283	519	181	207	388

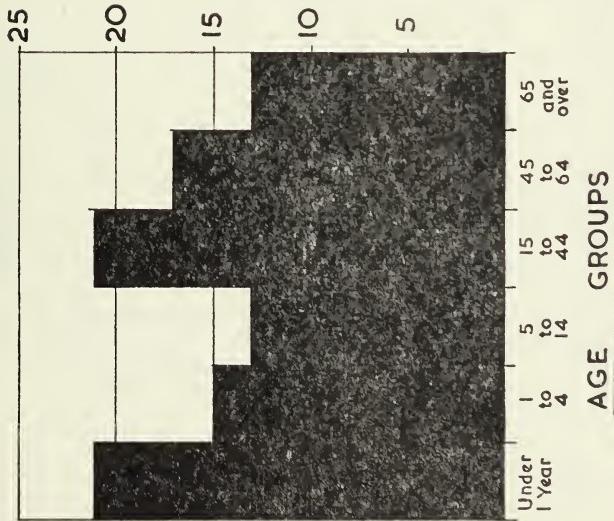
#### *Meningococcal Meningitis*

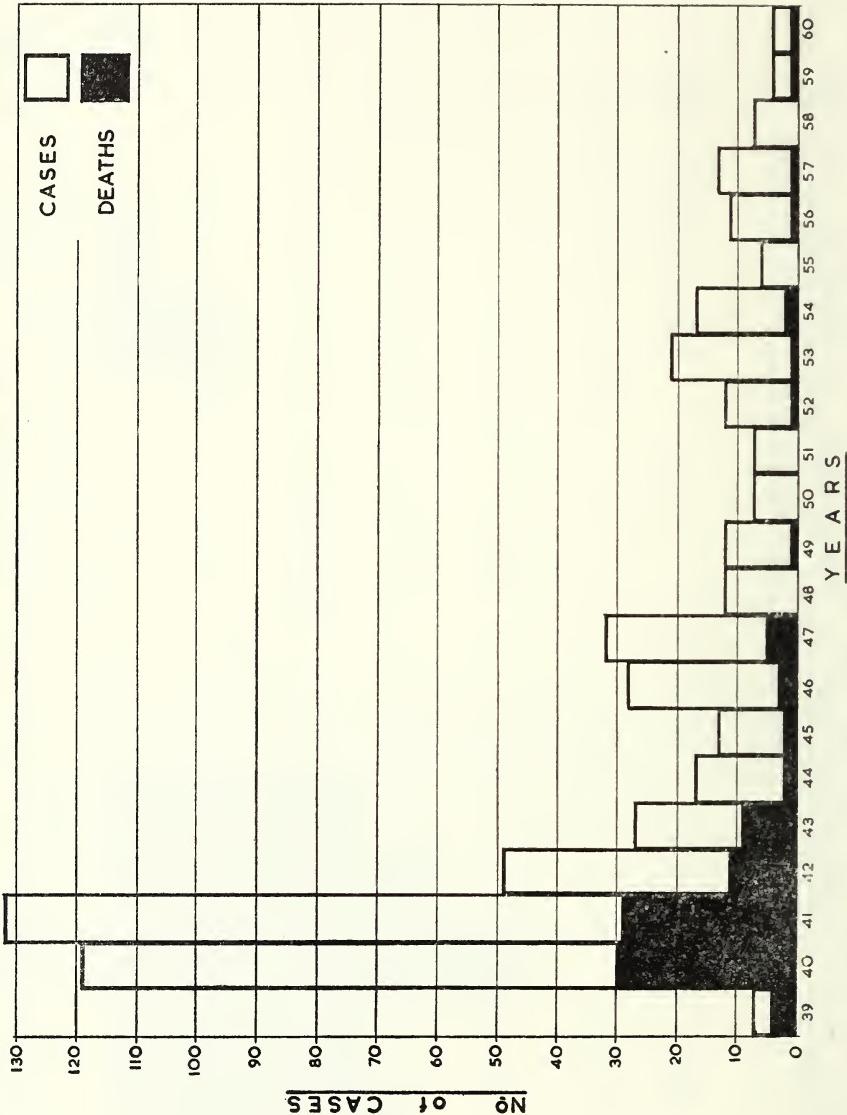
The incidence and mortality of this disease in Bristol has very much declined in the last ten years as the following histograms show. Recent cases have been sporadic and occurred in the great majority of cases in very young children. Prophylactic action by the Healty Department is limited in such cases to advising, prophylactic sulphadiazine for the contacts. Nasopharyngeal swabbing and the finding of carriers has been shown not to be a useful exercise, since the carrier state fluctuates rapidly and carriers seldom appear to suffer clinical disease. Although multiple cases seldom come from the same family, this does sometimes occur, even when the disease is sporadic, and hence the value of prophylactic sulphadiazine. Two of the fatal cases since 1950 have had the Waterhouse-Friderickson Syndrome.

DEATHS from MENINGOCOCCAL INFECTION in BRISTOL in AGE GROUPS

in TWO PERIODS 1939 to 1948 and 1949 to 1960

Years 1939 - 1948 inclusive



**CASES AND DEATHS FROM MENINGOCOCCAL INFECTION — 1939-1960**

## EMPLOYMENT IN THE BRISTOL AREA

The figures are estimates based partly on the number of national insurance cards exchanged in the quarter beginning June, and partly on returns rendered by employers of five or more workpeople, showing the numbers of insurance cards held by them.

Where information is available that cards were exchanged at one Local Office for persons working in the area of another Local Office, the figures for the former Office have been reduced and those for the latter correspondingly increased in order to make the figures in all cases relate as closely as possible to the numbers working in each area.

*Note:* This statement has been prepared for the purpose of providing an approximate indication of the industrial structure of the area. The figures are not sufficiently precise to enable comparisons to be made in detail between consecutive years, and no significance should be attached to relatively small changes.

We are indebted to Mr. S. J. Murray, Manager of the Bristol Employment Exchange of the Ministry of Labour and National Service for information contained in this Section.

*Estimated numbers of Insured Employees in the area of the Bristol, Avonmouth, Kingswood and Westbury-on-Trym Employment Exchanges at June 1960.*

Industrial Group		Males aged 15 and over	Females aged 15 and over	Total
Distribution	.. .. ..	18,255	15,281	33,536
Vehicles (Including Aircraft)	.. .. ..	23,380	2,889	26,269
Professional Services	.. .. ..	9,381	15,508	24,889
Transport etc.	.. .. ..	18,186	2,562	20,748
Food, Drink and Tobacco	.. .. ..	11,074	8,927	20,001
Miscellaneous Services	.. .. ..	8,353	11,025	19,378
Construction	.. .. ..	16,956	879	17,835
Paper, Printing & Publishing	.. .. ..	11,149	5,882	17,031
Engineering and Electrical Goods	.. .. ..	9,715	2,140	11,855
Public Administration	.. .. ..	4,653	1,370	6,023
Clothing and Footwear	.. .. ..	1,788	3,662	5,450
Insurance and Banking	.. .. ..	2,897	2,265	5,162
Public Utilities	.. .. ..	4,249	715	4,964
Chemicals etc.	.. .. ..	2,500	863	3,363
Metal Manufacture	.. .. ..	2,890	376	3,266
Timber, Furniture	.. .. ..	2,428	743	3,171
Other Manufacturing Industries	.. .. ..	2,271	752	3,023
Metal Goods	.. .. ..	2,034	720	2,754
Shipbuilding and Marine Engineering	.. .. ..	1,273	117	1,390
Bricks etc.	.. .. ..	1,032	343	1,375
Agriculture and Fisheries	.. .. ..	1,064	275	1,339
Textiles	.. .. ..	735	495	1,230
Mining	.. .. ..	699	64	763
Leather	.. .. ..	385	154	539
Ex-H.M. Forces	.. .. ..	71	—	71
<b>* Grand Total</b>		<b>157,418</b>	<b>78,007</b>	<b>235,425</b>

\*NOTE: Most civil servants have their contributions paid without the use of cards, and are therefore excluded from the figures. Also excluded are seafarers employed on foreign-going ships, whose contributions are paid in bulk.

## The Weather in 1960

Month	Air Temperature ( $^{\circ}F$ )				Rainfall (")				Sunshine (hours)				Soil Temperature ( $^{\circ}F$ ) at 09.00 G.M.T.		Pressure (mb) at 09.00 hrs.	
	Means Max.	Means Min.	Diff. from normal	Max.	Min.	No. of ground frosts	Total	Per cent of average	Daily means	Per cent of average	4'	8'	24'	Mean		
January ..	45.8	36.0	40.9	+0.5	55	24	16	3.57	107	0.98	1.06	68	39.4	40.3	43.1	1015.3
February ..	45.9	35.2	40.5	-0.2	61	25	18	2.56	99	0.37	2.71	115	38.3	39.9	41.8	1008.4
March ..	50.2	38.5	44.4	+0.6	61	31	11	2.53	117	0.47	2.50	64	42.5	43.2	44.9	1011.0
April ..	56.8	40.5	48.7	+1.1	64	29	10	1.50	68	0.53	5.24	95	48.2	47.9	48.2	1020.3
May ..	64.5	47.7	56.1	+3.0	74	37	1	1.16	45	0.40	6.04	96	57.5	56.4	55.7	1018.7
June ..	70.2	52.7	61.5	+3.0	81	44	0	2.21	100	0.56	7.93	113	64.9	63.8	62.3	1019.1
July ..	66.3	53.2	59.7	-1.8	72	45	0	4.86	155	0.94	4.97	78	63.1	62.1	62.5	1011.8
August ..	66.7	51.7	59.2	-1.8	73	43	0	4.83	132	1.01	5.17	87	61.5	61.2	62.2	1011.6
September ..	62.8	49.3	56.1	-1.0	73	40	1	4.91	151	1.16	3.87	83	57.5	58.1	60.2	1014.9
October ..	56.9	45.4	51.1	0.0	65	31	7	6.34	163	1.14	2.28	69	51.9	52.5	55.2	1004.0
November ..	52.0	40.8	46.4	+0.7	61	28	12	4.80	130	0.74	2.60	138	45.7	46.4	49.3	1003.4
December ..	45.3	35.8	40.5	-0.9	54	28	23	4.86	133	1.91	1.83	124	40.7	41.9	45.1	1008.0
Totals or Means ..	56.9	43.9	50.4	+0.3		99	44.13	122			3.84	92	50.9	51.1	52.5	

# PERSONAL HEALTH SERVICES

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## MATERNAL & CHILD HEALTH, NURSING AND ALLIED SERVICES

Dr. Sarah Walker

(Senior Medical Officer—Maternal and Child Health)

Looking back over the past twelve years, since the introduction of the National Health Service, we note the gradual evolution of our own maternal and child health services to meet modern needs, and a strengthening of the links with the general practitioner and hospital services in the City.

In the maternity service we have seen the development of an integrated scheme, starting in 1952 when a number of general practitioners began to undertake the ante-natal care of their patients in the Health Clinics: there are now eighty-six general practitioners participating in this arrangement. Reference has been made in previous Reports to the valuable consultant service provided by the obstetricians in certain of the main peripheral clinics. In this way, all members of the "obstetric team"—general practitioner, obstetrician and midwife, meet under "one roof" and the mother attends at one centre within a reasonable distance of her home, to the mutual benefit of all concerned.

The importance of education of the expectant mother and expectant father is now fully recognised as an integral part of a pre-natal service. Parent-craft clubs have been provided at all ante-natal clinics, to meet this need. Again, the approach is a team one—medical officer, midwife, health visitor, nutritionist and physiotherapist, participating in the teaching.

With the great improvement in the physical health of babies and young children, there has been a shift of emphasis in recent years to mental and emotional needs. With this in mind, we are working closely with the Child and Family Guidance Service, which now operates in some of the peripheral Health Clinics. This association has given many of our staff, who work with young children and their families, a greater insight and understanding of emotional problems and human relationships.

It is important, however, not to overlook physical aspects of child care, particularly in the so-called "special families" where standards of general care and feeding often fall far below accepted standards. The work of the Family Service Unit and of the Section's team of a Medical Officer and four health visitors, referred to later in this Report, direct much of their efforts to improving the physical care of children in these families.

Reference is made in the section of this Report dealing with the welfare of unmarried mothers, to the rise in illegitimacy and the increase in the numbers of very young unmarried mothers, i.e. those under sixteen years of age. This is a national experience and while it is certainly a matter of concern, it is important to keep a sense of proportion since the numbers of very young girls who have illegitimate babies is extremely small in proportion to the relevant age-groups in the population. Nevertheless, the trend is one which focuses the attention on the whole question of moral standards and an understanding of the adolescent.

In association with Dr. W. A. Gillespie, Bacteriologist, United Bristol Hospitals, and Dr. Beryl Corner, Consultant Paediatrician, an enquiry into the incidence of staphylococcal infection amongst young babies and their families was started in November. Very encouraging results have been obtained by prophylactic measures introduced to combat staphylococcal infection amongst

the newborn in the City's maternity hospitals, but a follow-up enquiry is needed to determine the degree of protection these measures confer on the infant and his family. This enquiry, which is to cover a period of twelve months, has only been made possible by the close co-operation of the general practitioners and the parents of the babies concerned.

In June 1960 the National Association for Maternal and Child Welfare held its forty-sixth Annual Conference in Bristol at the invitation of the City Council. This conference was held in Bristol on one previous occasion, in 1938. The delegates, who numbered over four hundred and attended from all parts of the United Kingdom and from overseas, were welcomed at a Reception given by the Lord Mayor, Alderman A. Hugh Jenkins and the Lady Mayoress. The conference, which lasted three days, was opened by Miss Edith Pitt, Parliamentary Secretary to the Ministry of Health.

In August of this year, Dr. Greta Hartley, a First Assistant Medical Officer in the Maternal and Child Welfare Section, retired after thirty-one years in the Department. Dr. Hartley was a most gifted doctor. As Medical Officer to the Downend Babies' and Children's Homes, her knowledge and experience of medical work with deprived children is probably unequalled in the country. Dr. Hartley, by her outstanding clinical ability, integrity and humanity, earned the respect and affection of her many patients and colleagues, and her retirement has been a great loss to the Department.

### Domiciliary Midwifery Service

Year	Bookings	Deliveries	Home Investigations	Follow-up of Patients from Hospital	
				No.	Visits
1959	..	2,472	1,727	1,744	1,449
1960	..	2,367	1,785	2,146	1,475
					12,117
					13,042

In 1960, 25·6 per cent of Bristol mothers were delivered at home and the remaining 74·4 per cent in hospital. The percentage of outside City mothers delivered in Bristol hospitals has increased over the years from 16 per cent in 1952 to 27 per cent in 1960. The high proportion of hospital deliveries in the City has only been maintained by an increasing number of early discharges for home nursing, as shown in the following table:—

Year	No. of Births in Hospital (Bristol Residents)	Mothers Discharged Early for Home Nursing—		
		in first 3 days	4th—6th day inclusive	7th—9th day inclusive
1956	..	5,043	178	240
1957	..	5,314	284	406
1958	..	5,249	396	662
1959	..	4,995	423	692
1960	..	5,207	476	753

The majority of these early discharges are planned, i.e. there is a prior home visit and report by the midwife during the ante-natal period on the suitability for early discharge for home nursing, so that the mother knows in advance that, if everything is satisfactory, she will return home early and can therefore prepare accordingly.

The policy of early discharge is a debatable one. The Cranbrook Committee favour retention of mother and baby in hospital for the full ten days. While I am satisfied that with "planned" early discharge the mothers and babies have received every care from our domiciliary midwives, I think that if the present increasing trend continues, the matter will warrant review. I would suggest that consideration might be given to the setting up of a unit in association with a main maternity hospital where a mother could be delivered by her general practitioner and domiciliary midwife, and then return home for nursing, thus ensuring continuity of care, without the change of medical and nursing attendants half way through the lying-in period.

Social cases, in the majority of instances, have to be retained in hospital for the full ten days. In an appreciable proportion of social bookings, it is not lack of suitable accommodation but the inability to ensure help to cover mother and baby throughout the twenty-four hours. Many husbands work irregular hours, others away from home, so that our Home Help Service cannot provide complete cover. It is the exception today to find women relatives free to stay with the mother at this time.

Miss D. I. Gearing, Supervisor of Midwives, reports:—

The year 1960 has been another eventful one for the Domiciliary Midwifery Service in that it saw the commencement of the Night Rota System in which all calls between the hours of 6 p.m. and 7 a.m. go through to a central number. These calls are received by a member of the Midwifery or District Nursing Staff, who in turn notifies the appropriate midwife. The system is working very well and is much appreciated by the staff, and has attracted some of the younger midwives to this field of midwifery, but I regret to say that even this is not the full answer to their settling: they complain of loneliness and isolation after community life.

The work during the year has increased, with a slight increase in deliveries, but a considerable increase in home investigations and in the number of visits paid to patients discharged early from hospital for home nursing. At the 31st December 1960, we had a staff of thirty-four full time midwives and three part-time midwives.

Full time and part-time midwives have combined to take an active part in the teaching in Parentcraft clubs, run in association with all our ante-natal clinics.

Miss Pugh, Deputy Supervisor of Midwives, has continued to give talks to school leavers.

The Bristol City District Training of Pupil Midwives has been most successful and to date we have had 100 per cent passes and pupils have very much enjoyed their six months' training. The training of pupils in conjunction with the Bristol Maternity Hospital has also continued with good results.

Four midwives have attended post graduate courses during the year.

Foreign midwives, visiting the Department during the year, have been very impressed with our midwifery service and much appreciated their visit. We continue to train a number of overseas midwives each year.

The two premature baby midwives continue to do good work and maintain a close association with the Premature Baby Units and Southmead and Bristol Maternity Hospital.

## Sub-Fertility Clinic

Mr. E. M. Edwards from Professor Lennon's Department acts as the consultant for this clinic: he holds regular weekly sessions at which special investigations are carried out. Dr. Norma Boxall and Dr. Irving Bell complete the medical team.

Dr. F. Norma Boxall, Medical Officer, reports:—

No. of new patients seen:	..	..	..	210
No. of attendances of old patients:	..	..	..	1,160
No. of pregnancies reported:	..	..	..	55
(26.5 per cent)				

The Clinic continues to be used by general practitioners and others who refer patients, not only with sub-fertility problems, but with marital problems also.

A total of forty-one patients has been seen this year who have had marital difficulties, with or without subfertility and to deal adequately with them is time-consuming, but worthwhile. It is found that several interviews are necessary to elucidate their problem and to help them achieve a normal marriage in every sense.

Since routine haemoglobin estimations have been carried out, quite a number of women with iron deficiency anaemia have been found and their doctors have been asked to treat them. Also a number of women with an unsuspected illness or pathological lesion have been found and the necessary treatment arranged. A modification of the treatment of pelvic tuberculosis is being tried. A new product—Ethionamide—is being used combined with graduated rest at home, instead of hospital in-patient treatment, and should this prove to be satisfactory, it will result in a saving of hospital beds. In all, five new cases of pelvic tuberculosis have been detected.

One disquieting fact has emerged from this year's figures: there has been a large number of early miscarriages among the pregnancies. This will need to be investigated more fully, but may not prove to be more than the average. Our cases are almost always reported by the patient, while many miscarriages among the general population are not mentioned to the family doctor.

This clinic would be an ideal place to detect pre-cancerous, cervical lesions in older women by cytological measures, but unfortunately it is impossible to find a technician with the necessary experience and time at his disposal to deal with this.

Dr. R. J. Irving Bell, who is responsible for the male sessions of the Clinic, reports:—

The number of new cases seen at this Clinic during 1960 was 105, and the total attendances 244.

There has been only one full session devoted to this work each week, namely Thursday evening, at the Central Health Clinic. A half session is sometimes arranged on a Tuesday morning. General practitioners are responsible for the majority of referrals. An analysis of new cases shows that:—

General Practitioners referred	..	..	55.0 per cent.
Female Infertility Clinic	..	..	34.4 „ „
Hospitals and self	..	..	7.6 „ „
Marriage Guidance Centre and			
Family Planning Clinic	..	..	3.0 „ „

With regard to special tests, as usual all semen analyses have been carried out at the Pathological Department of Frenchay Hospital. Cases requiring testicular biopsy were referred to Dr. G. L. Foss at the Bristol General Hospital.

With the increasing trend for early (even teenage) marriages in this country, a trend to be deplored, as emotional immaturity is usual during adolescence and often leads to marital breakdown, it would appear that some scheme relating marriage preparation to Registry Offices might be developed.

Clinic sessions devoted to premarital examinations and marriage preparation might be set up and linked with the Marriage Guidance Centre (now at 7 Berkeley Square) and the Family Planning Clinics. Notices of these facilities could be displayed in Marriage Registry Offices, Churches and Church Halls.

### **Child Health and Welfare Services**

Child health sessions continue to be held throughout the City in the main clinics and in church and community halls.

A new health clinic, the Amelia Nutt, was opened during the summer in Withywood. This new clinic provides a much-needed centre for the many mothers with young children who live on this estate. The local general practitioners see their ante-natal mothers in the clinic, and an excellent team spirit is apparent in the area.

Reference has already been made to the close co-operation existing between the Maternal and Child Health and the Child and Family Guidance Services. The three consultant psychiatrists and the team of psychiatric social workers hold consultation sessions at the peripheral clinics at the Mary Hennessy (Hartcliffe), Southmead, Broadfield Road, William Budd and Lawrence Weston Clinics. The psychiatric staff hold regular conferences with the medical officer and health visitors at each centre as part of a scheme of "in-service training" in the recognition and handling of problems and behaviour difficulties in young children, considered in relation to their family background.

While the health visitors aim to keep all young children in their areas under review, with average case loads of five hundred children under school age, it is obvious that home visiting has to be concentrated on priority groups—the delicate and handicapped children, and children in special families where standards of mothercraft are poor.

#### *Liaison arrangements*

Close co-operation in the interest of maternal and child health and welfare exists between the Department, the general practitioners and the hospitals in the City. Dr. Hopkins, First Assistant, Maternal and Child Welfare, attends the Bristol Children's Hospital and Southmead Hospital for purposes of liaison, particularly in relation to children from "special" families, who are often "in and out" of hospital. Similarly, a health visitor attends the Children's Hospital to act as a link with her colleague health visitors in the field.

Detailed reports on all children who have been in-patients in these hospitals are sent to our Department.

A closely co-ordinated scheme has operated for many years for the care of premature babies. Dr. Mary Gibson, Deputy Senior Medical Officer, Maternal and Child Welfare, assists Dr. Beryl Corner, Paediatrician in Charge at the Follow-Up Clinic for Premature Babies, held at Southmead Hospital. Dr. Kathleen Faulkner, similarly, assists at the Bristol Maternity Hospital. The two district midwives and the two health visitors who specialise in this work complete the team.

While we have not, to date, set up any special scheme for home nursing of sick children, as an alternative to hospital admission, it will be noted from Miss Grazier's report of the work of the District Nursing Service, that the district nurses undertook visits to 84 children under five years and 121 between five and fifteen years during 1960.

We are indebted to the Bristol Children's Hospital for admitting young children (2—8 year olds) on our recommendation, for varying periods of convalescence at their Jan Smuts Home at Burnham-on-Sea. The children concerned have derived great benefit from the excellent care received at this Home.

#### *Hearing Assessment Clinic*

This Clinic, which includes facilities for the ascertainment of deafness in very young children, is under the direction of Mr. H. D. Fairman, E.N.T. Consultant. Dr. Helen Gibb, who acts as medical officer to the clinic, reports in detail in Section "F" of this Report.

#### *Day Nurseries*

The seven day nurseries in the City continue to make provision for the young child in need of care, either on a temporary basis to meet family emergencies, such as illness of the mother, or long term—particularly to enable the "unsupported" mother to earn a living and thus provide for her child.

Delicate children, including some who are retarded in development, and children from certain special families, are also admitted, according to need.

Most of the day nurseries carry a "waiting list". There is a very great need for day nursery and also nursery school provision in the Hartcliffe/Withywood areas. Although a special bus brings children in from these estates to Coronation Road Day Nursery, numbers have to be limited to fifteen, so that only the mere fringe of the problem is being met. Health and social workers on these estates are of the opinion that a number of mothers with several young children, who have broken down under the strain, cannot cope without some relief in the form of nursery provision for some, at least, of their children, particularly the 3—5 year olds.

### **Dental Care**

Mr. J. McCaig, Chief Dental Officer, reports:—

There is little change in the volume of work carried out for expectant and nursing mothers and pre-school children, since last year. The number of expectant and nursing mothers receiving a dental inspection is 781 out of 5,000, approximately, attending the ante-natal clinics in the City.

The need for more dental inspections is very apparent and there is considerable scope for an energetic campaign to encourage dental health among ante-natal patients. It is obvious from the above figures that many mothers do not receive a dental inspection, and the opportunity for individual advice and instruction is lost. Young mothers are interested and willing to learn; they are more receptive and to make them "tooth conscious" should be our aim. The first visit to the ante-natal clinic should include a dental inspection which would require the full co-operation of the doctors, centre superintendents and dental officers.

Of the 781 mothers inspected during the year, 770 required treatment and of these 671 were treated. This is a high acceptance figure and is encouraging. More mothers received treatment for fillings than had teeth extracted. Although Table 3 shows 919 fillings as against 1,212 extractions, many of the extractions were for full upper and lower dentures, therefore the latter figure is increased proportionately.

The figures for pre-school children are not so encouraging, in fact they are alarming, showing 1,783 extractions as against 286 fillings. This raises the question of whether the battle against dental caries is futile, a problem which weighs heavily on the School Dental Service. Our difficulties are increased by the fact that the service throughout the country is understaffed with a slow rate of recruitment. The outlook of the School Dental Service is indeed bleak unless drastic measures are taken to correct the present trends. Treatment has taken first place to prevention and here lies the failure of the present policy as it is quite impossible to carry out all the treatment required for pre-school children. There are two methods which would help to solve the problem, (a) attention to food and (b) dental health education.

- (a) Our sole hope of ensuring that future generations will have good teeth is to carry out searching investigations into the relationship of food growth to animal and human health and to reduce the deleterious processing and chemical treatment of food. Today a taste of real butter, meat and eggs and many other things is to people of mature years like a whiff from childhood.

The effect of tampering with food supplies is emphasised in the fact that when the white population arrived in New Zealand nearly a century and a quarter ago, the Maori population of that country who lived upon natural products, had a caries rate of three per cent. At the present time the population of New Zealand, both white and Maori, has the highest caries rate in the world.

In November the Cook Committee reported that milk had been declining in quality for over thirty years. Certain legal standards were recommended to improve it, but they were rejected. Why is milk not as good as it used to be? There are three reasons:—

- (1) Underfeeding of cattle
- (2) Guaranteed market abolishes incentive
- (3) Swing over to herds of cattle which give high milk yields but of a lower standard.

The same decline in standards is happening in other branches of agriculture. The introduction of broiler hens, broiler calves, etc. has meant plenty to eat, but is it worth eating? In other words the accent is on quantity before quality. When we have learned to produce both we will have achieved something worthwhile.

There is need for more extensive tests of the effects on health of food additives and pesticides. Their testing is a matter of urgency as some additives already in use have not been adequately investigated. A recent outbreak of illness ascribed to an additive used in margarine affected 100,000 people on the Continent and caused two deaths. Spraying fruit trees may be necessary but the effects of some sprays are as yet unknown and are a constant anxiety in medical circles. Additives can be dangerous when they disguise faulty processing, reduce the nutritive value of food, or exert toxic or other effects.

This is a crazy and mixed up age and I wonder if even Lewis Carroll would be able to find his way around such a "looking glass" world: a world where millions die in the East of starvation, and where in the West, the Canine Defence League offer to spend £100,000 to save a dog, while a comparatively small donation of £5,000 has been made in the cause of dental health and scientists urge us to eat leaf mould.

Psychologists emphasise the aspects of food acceptance, but the high-flown plans of nutritionists will be useless, unless the ordinary people can be persuaded to like the new and highly nutritious food planned for them. Leaf protein, according to the experts, is a dry-textured food, tasting somewhere between spinach and hay. As spinach has its opponents as well as its adherents and hay has never been a popular foodstuff, leaf protein shows no more promise of general acceptance than the whalemeat and the snoek pressed on an unwilling public when meat was scarce.

The body assimilates and uses food. It is important for the health of the nation that the food is of high quality and free from contamination, as the primary requirements of sound teeth ultimately depend upon inheritance.

- (b) In dental health education, publicity should not be designed to produce a "flash in the pan" effect, but to keep continuously before the public the importance to them of good, sound teeth. The contribution by the Dental Hygienist in this connection is very much appreciated by the various groups who have the benefit of lectures, talks and instruction by film strips.

In Bristol the first appeal is made to young wives, expectant and nursing mothers, and to mothers of toddlers. Talks are arranged at ante-natal clinics and child welfare centres and audience participation is encouraged. Group discussion techniques are conducive to the production of attitude changes within the individuals making up the group, as the result of a general group reaction. Thus the aim is not only to inform, but to try to alter attitudes to erroneous popular beliefs, e.g. that sugar is essential for energy. It is desirable to have a knowledgeable and well-informed public capable of making its own decision as to personal welfare.

The advancement of medical knowledge frequently brings to light the fact that previously held opinions were wrong and the beliefs of one generation of doctors and health visitors tend to persist in the next generation of patients. Not so long ago, babies' gums were lanced for teething troubles. Teeth that were healthy but showed arrested decay (black, hard surfaces) were extracted as decayed teeth. Decay in teeth is usually brown. In one city, so many patients were sent along by doctors for extractions, that a note was sent round to them which read "Please do not send black ones, only brown ones."

Learning about dental health is not limited to situations in which actual instruction is given. It results from a wide variety of experiences in the home and community. In one well-known firm, facilities are not provided for dental treatment, but there is a free voluntary dental inspection scheme. The employees are told of the wisdom of having dental treatment and are informed of the necessity to take simple measures of oral hygiene. The staff manageress follows up with a personal approach to each employee, if necessary. The report from this company shows an unusually high degree of oral health, hence the value of enlightened policy.

Parents and patients are often confused by the conflicting advice offered on prevention. Dentists differ so much in their ideas and thoughts that there is little chance of a generally accepted scheme being adopted. However, every effort should be made to effect one, so that more co-operation and respect from the public would be obtained for the professional advice given.



GROUP DISCUSSION IN PROGRESS



INDIVIDUAL STUDY IN THE LIBRARY



STUDENTS IN THE COMMON ROOM



HEALTH VISITOR STUDENTS AT A LECTURE

## Health Visiting Service

Miss L. M. Bendall, Chief Nursing Officer, reports:—

1960 has proved itself to be a year of steady progress in the health visiting field. This is largely due to the level of recruitment which has been maintained through our training scheme over the past two years, resulting in an increased permanent establishment of health visitors.

In my report last year I mentioned the re-organisation of the health visitors' work at field level which was at that time taking place. This has now been completed and at the end of 1960 every district was covered, and with the reduction of case loads the health visitors are able to devote more time to the families under their care.

The health visitors' duties continue to follow their usual pattern: (a) home visitation, (b) work in clinics, nursery schools and classes.

### (a) *Home Visitation*

The district health visitors continue to visit homes for the purpose of giving advice on the care of children, persons suffering from illness, and to expectant and nursing mothers, and on the measures necessary to prevent the spread of infection. Each health visitor works within a prescribed area and is responsible for all families living within that area with the exception of certain specialisations which are dealt with later in this report.

In addition to the routine duties carried out by the health visitors I feel special mention should be made in this report of two surveys which commenced in 1960 and are still in progress. They are in connection with the "Incidence of Staphylococcal Infections in Babies, their Mothers and Families", and "Infective Hepatitis". It is not generally appreciated that a considerable amount of time and patience goes into this particular type of visiting and the health visitors have rallied well to this added task. I would like to record my appreciation of the health visitors' interest and co-operation.

The Area Case Committees at which the health visitors meet and discuss cases with other interested workers continue to flourish, as also do the Case Conferences held with psychiatrists and psychiatric social workers.

The health visitors have also carried out intensive health education in connection with both poliomyelitis vaccination and diphtheria immunisation, which has resulted in a most successful campaign.

### (b) *Work in clinics, nursery schools and classes*

The health visitors continue to be responsible for the organisation of the various clinics in the City and in addition, give advice to individuals and health teaching to groups in both ante-natal and child health clinics. Group teaching is carried out with the help of films and film strips. The teaching of parentcraft is a special feature and is much enjoyed by the expectant mothers (and fathers). The activities of the health visitors in the field of health education extend beyond the clinics, and talks are given both during the day and in the evenings to the various women's organisations throughout the City and to parent teacher associations. Some health visitors also give regular courses of lectures to Red Cross and St. John cadets.

In the many nursery schools and classes in the City, children are kept under supervision by the health visitors, who are also present with the doctor at the medical examinations.

### *Specialisation*

Specialisation has been a feature in the health visiting sphere in this city for many years and includes:—

Prevention of Blindness

Notification and Control of Infectious Diseases

Care of Chronic Sick and Aged

Special Families

Spastics

Care of Premature Babies born in hospital

Mental Health

In the school health field, specialisation is carried out in the care of mentally and physically handicapped children. Specialisation in prevention of blindness and special families is reported elsewhere in the Annual Report.

### *Care of Premature Babies discharged from hospital*

Miss E. Room reports:—

The year 1960 has proved to be a very busy one for the premature baby health visitors. After the restricted visiting of 1959 the total number of babies receiving this domiciliary after-care has once again risen; 353 babies were visited within the City boundary and 166 in Gloucestershire and Somerset, a total of 519. The average number of visits paid to each baby has also risen despite the fact that when fit, the babies have been discharged earlier than was practised a few years ago. The premature baby health visitors have felt that more supervision has been needed due to sickness and the fact that the larger babies not cared for in the Premature Baby Units have not always been established when sent home from the hospitals.

In March a Post-Graduate Course was held in Bristol on the Premature Baby. The matrons and premature-unit sisters attending from various parts of the country were taken out by the two health visitors on the normal visiting rounds.

### *After Care of the Mentally Sick*

Miss M. Hancock reports:—

Since March 1960 I have been working part-time with the Industrial Therapy Organisation (Bristol) Ltd. This non-profit making company has been developed from rehabilitation work begun at Glenside Hospital, Bristol.

I.T.O. is housed in a disused school in St. Philip's Marsh. It provides medically and industrially supervised employment training in surroundings as near as possible to ordinary factory surroundings and conditions. The patients then progress to work with sympathetic employers in outside industry.

Some of the I.T.O. employees are hospital in-patients, some are referred by their general practitioners, some by the Mental Health Authorities, and some by National Assistance Officers: so far, no-one requesting admission has been refused.

I visit the out-patients, sometimes with the person referring them, and report on the patient and home conditions. I also explain I.T.O. to the patient so that he knows exactly what to expect and inform the National Assistance Officer when new patients start, as N.A.B. supplement their earnings.

When in-patients are ready to be discharged home I work closely with the social workers at Glenside Hospital in getting matters arranged, and when out-patients fail to attend I visit them at home to find out the reason. When patients have no home or relations, other accommodation must be sought and it is very difficult to find suitable lodgings at a price the patients can afford. There appears to be only one hostel providing full board and lodging for women at £2 10s. 0d. weekly, while the only suitable place for men seems to be the Church Army Hostel, and this type of accommodation does not always appeal.

Since I.T.O. started, thirty patients who have been from two to thirty-three years in hospital, have been placed in outside employment and more have been discharged to live at home, but continue to work at I.T.O.

The reports on all patients placed in industry have been very good—only one has left her job for an inadequate reason, while the improvement in appearance of those in-patients continuing to work at I.T.O. has been most marked.

### *Spastics*

Miss N. Paget reports:

As I reported last year, I commenced the supervision of spastics in September 1959, so that 1960 is the first complete year of follow-up. I continue to attend the Cerebral Palsy Assessment Clinic at the Children's Hospital and the rest of my time is spent at the Claremont School for Spastics, and on home visitation, with an occasional visit to the Spastics Centre. The greatest proportion of my time, however, is spent in following-up cases throughout the City and I am glad that I am able to give advice and encouragement to the mothers of these afflicted children.

From time to time there is evidence of the need for special appliances in the home and these needs are referred to the Ministry of Pensions through the Medical Officer of the Assessment Clinic.

### *Notification and Control of Infectious Diseases*

Miss M. Hatfield reports:

During 1960 the pattern of infectious diseases continued to change. For the first year since 1947 there were no cases of poliomyelitis. The incidence of meningitis was increased by a mild outbreak of aseptic meningitis, mostly confined to one area of the City. This necessitated specimens of stools being collected from patients and household contacts.

There was also a great increase in the number of cases of infective hepatitis. Schools involved were visited to ascertain the methods of hygiene carried out and advice given to members of the staff concerned. Contacts of cases, mothers of children with hepatitis, who were pregnant, were also visited to enquire into the giving of gamma globulin serum as a preventive measure.

I would like to include in this report an interesting experiment which was carried out on behalf of the Medical Research Council with regard to oral poliomyelitis vaccination. Twenty-five children were selected to take part in this experiment which necessitated a considerable amount of home visiting. During the experimental period, specimens of stools were collected from the children and their parents for periods varying from one to three months after the last dose. This entailed visiting the households three times weekly over a period of six months. The findings of this experiment are not yet complete.

### *Chronic Sick and Aged*

Miss M. Newns reports:

I am one of the team of four who specialise in this aspect of health visiting and find my work interesting and rewarding. It gives me wide scope to use initiative, sympathy and understanding.

The four specialist health visitors carry out the initial visiting, ascertain the need and make the necessary contacts to arrange services either voluntary or statutory which will be helpful to the patient. The aim is to keep the elderly person in her own home if possible and so relieve pressure on hospital beds. The shortage of hospital beds is a very real difficulty, but we appreciate the co-operation we enjoy from the Area Geriatrician and the hospital admissions office.

For those persons who remain in their own homes the many services provided include home nursing, home help, night-sitter, loan of nursing equipment, linen and laundry loan service, and mobile meals and friendly visitation by the W.V.S.

Other services much appreciated by these elderly folk include the chiropody service and the provision of convalescence. Once the need has been met and we are satisfied that the patient has been given all the help possible, the case card is handed to the district health visitor for routine follow-up. Should a further crisis arise, the card is returned to the specialist health visitor who will take any further steps which may be necessary.

Each elderly person when visited for the first time is given a card with the name of the specialist health visitor and address and telephone number of the clinic at which she is based, so that contact can be made with her if necessary.

### *Chest Department*

The staffing establishment in the Chest Department remained unchanged during 1960, consisting of one sister-in-charge and eight tuberculosis visitors. The work is interesting and varied, it includes both home visiting and work in schools and clinics.

In the out-patients clinic, the pattern of the work is changing as more patients with other diseases of the chest are being seen by the chest physicians.

There is close liaison between the medical staff of the Chest Department and the Health Department. Case conferences are held once a month conducted by the Consultant Chest Physician where clinical, housing or welfare needs are discussed for the benefit of the patient and his family.

The follow-up by the tuberculosis visitors in the homes of the patients constitutes much of their work. Here advice is given with regard to the general care of the patient, hygiene, disinfection, the need for X-ray of all contacts and the offer of B.C.G. vaccination for the under twenties. Patients are also advised as to the help which can be given by the welfare officer.

The nursing staff are also responsible in conjunction with the school medical officers for B.C.G. vaccination of the thirteen-year-old school children.

### *Home Nursing Service*

A report by Miss G. M. Grazier, Senior Superintendent, is included elsewhere in the Annual Report, but mention should be made of the fact that the Home Nursing Service has completed its first year under the direct control of the Medical Officer of Health.

At field level the work has remained the same although there have been several minor integrations which have brought the district nurses into line with the other nursing services.

At administration level, liaison with the Home Nursing Services has become more firmly established, partly of course, due to the fact that the senior staff are located in one building and under the Medical Officer of Health's roof.

### **Ancillary Nursing Services**

#### *Clinic Nurses*

At the end of 1960 there were five full-time and thirty-five part-time clinic nurses on the establishment. They are all State Registered Nurses who carry out routine nursing skills in the various departments of clinics. By this means health visitors have been relieved of all duties for which their special qualifications are not required.

I would like to mention especially the invaluable work carried out by the clinic nurses in connection with the diphtheria immunisation campaign in schools, and the poliomyelitis campaign in schools, factories, shops etc.

I would like also to report on the work carried out by the three full time nurses in connection with haemoglobin tests. Specimens of blood for testing come in from the various ante-natal clinics throughout the City. Three nurses were trained to perform this test by Dr. Lewis, Consultant Pathologist of Southmead Hospital, and they deal with approximately 200 specimens a week.

#### *Physiotherapists*

There has been no change in the establishment during the current year which consists of three full-time and two part-time physiotherapists. Their work has followed its usual pattern, namely remedial exercises, massage and sunlight treatment, carried out in schools, clinics and Welfare Services Department Homes. In addition one of the full-time and the two part-time staff continue to carry out an extensive programme of relaxation classes (in conjunction with parentcraft) in the various ante-natal clinics in the City, as well as in the City's Home for unmarried mothers.

#### *Dental Attendants*

There were fourteen dental attendants on the establishment at the end of 1960.

#### *Clinic Helpers*

An establishment of twenty was maintained during 1960. These clinic helpers are women with good nursing experience and quite a number are State Enrolled Assistant Nurses. They relieve the trained staff in clinics by performing the lesser nursing duties under supervision, i.e. treatment of skin conditions, minor ailments and cleansing of verminous heads. They are also concerned in the sale of welfare foods, and escorting children to and from residential schools and nurseries.

I would like to make special reference to the work carried out by clinic helpers in connection with the needle and syringe service. Six of these helpers are occupied full-time in the cleaning, sharpening, sterilising and packing of needles, and cleaning, sterilisation and packing of syringes. They work under the direction of the Head Pharmacist. This is a very important contribution to the success of the poliomyelitis and diphtheria immunisation campaigns, B.C.G. vaccination and blood testing in connection with ante-natal care.

### *Clinic Assistants*

This continues to be a flourishing section of the nursing establishment. Candidates are carefully selected and it is gratifying to record that a high percentage of these girls go on to full nurse training. Indeed, quite a number of our established nursing staff commenced their nursing careers as clinic assistants with this Department.

### *Night Watcher Service*

This is the newest, but by no means the least important of the nursing services. It commenced in January 1957 and during its first year the number of nights worked numbered 580. The growth of the service during the last four years will be appreciated when it is recorded that during 1960 the number of nights worked numbered 1,285.

Recruitment to this service is reasonably adequate and great care is taken in selection of candidates who must all be mature, kindly women, with good nursing experience. Here I would like to mention the introduction in November of a male night watcher to the service. He is a recently retired S.E.A.N. and has proved very useful in the night care of old men. It is hoped, if suitable candidates are forthcoming, that one or two more men may be recruited.

The Night Watcher Service is surely one of the most compassionate of our nursing services, assisting as it does both the sick and their relatives. Many tributes have been paid to these women which are worthy testimonies to the good work they are doing and a pleasing note on which to conclude this report.

## **Health Visitor Training**

Miss J. Sangster, Principal Health Visitor Tutor, reports:

There were twenty-three students in the 1959–60 Health Visitor Training Course which finished on July 1st, 1960. Twenty-one students were successful in the examination of the Royal Society of Health; of these, thirteen who were sponsored by the City are working in Bristol. The remaining two students passed the examination of the Royal Society of Health for Health Visitors and School Nurses for Appointments outside England and Wales. They wished to work in their own country and one had returned to Nigeria and the other will be going to Hong Kong.

Last year I noted the great step forward that had been made due to the lengthening of the training in Bristol, and commented that this had enabled the students to have a better preparation for their work as health educators and family advisors. In 1960 the second course was completed, lasting a full academic year, and it was possible to consolidate the progress made during the previous year; now the training has been further improved by moving to new premises.

There has been a scheme of health visitor training in Bristol since 1930 and during most of this period it has taken place at 36 Queen Square. This is an old house which has a certain charm but many inconveniences. Just before the beginning of the present session, which started on October 6th, the training centre moved to new premises at 21 Prince Street, Bristol 1. The building is shared with doctors studying for the Diploma of Public Health and with the Statistical Unit. In this new building each group of students has a separate lecture room; these are quiet and spacious. There is a comfortable common room and a kitchen. A small library provides accommodation for individual and quiet study.

At present there is a full group of twenty-four students in training who will complete their course on July 5th, 1961. Sixteen of them have undertaken to remain in Bristol as health visitors until September 1962.

#### *Clinic Assistants*

Girls who are waiting to start nurse training continue to have classes for a half day each week with Miss P. M. Tarbuck. This instruction should increase their interest in the work they are undertaking in the Health Department and give them a knowledge of the community health services before they enter hospital.

#### *Student Nurses*

Lectures are given and visits to the Health Department are arranged for nurses in training in the hospitals in Bristol. These sessions help arouse an interest in the public health services.

**Home Nursing Service**

Miss G. M. Grazier, Superintendent of Home Nursing, reports:

**Staff**

Administrators	..	..	..	6
Queen's Nursing Sisters	..	..	..	61
Male Queen's Nurses	..	..	..	3
State Registered Nurses	..	..	..	2
State Enrolled Assistant Nurses	..	..	..	6
Student Queen's Nurses	..	..	..	5
Part-time (3 Q.N.s, 1 S.E.A.N.)	..	..	..	4

Total 87*Students Trained during the Year*

County Students	..	9
Staff Students	..	8

Total .. 17*Nursing Statistics*

		1960	1959
Number of Cases on books 1st January	..	1,864	1,930
Number of New Cases attended during the year	4,979		5,528
Total ..	..	<u>6,843</u>	<u>7,458</u>

*Cases Sent by:—*

Doctors	..	..	..	5,470	5,942
Hospital Authorities	..	..	..	1,085	1,205
Health Department	..	..	..	82	60
Patients' Friends	..	..	..	206	251

*Analysis of Cases*

	Cases	Visits	Cases	Visits
Tuberculosis	..	80	3,242	70
Other infectious diseases	..	40	922	63
Parasitic diseases (inc. thread worms)	..	2	7	—
Malignant and lymphatic neoplasms	..	430	16,205	409
Asthma	..	10	60	25
Diabetes Mellitus	..	372	60,381	406
Anaemias	..	428	12,172	480
Vascular lesions affecting central nervous system	..	576	22,496	550
Other mental and nervous diseases	..	164	8,654	159
Diseases of the eye and ear	..	67	1,503	92
Diseases of the heart and arteries	..	932	32,922	1,055
Diseases of the veins	..	192	9,314	193
Upper respiratory diseases	..	129	1,073	171
Other respiratory diseases	..	479	9,462	694
Constipation and diseases of digestive system	..	646	9,156	615
Diseases of urinary system and male genital organs	..	117	2,214	131
Diseases of breast and female genital organs	..	200	3,330	236
Complications of pregnancy and puerperium	..	101	1,002	85
Diseases of skin and subcutaneous tissues	..	242	6,168	296
Diseases of bones, joints and muscles	..	296	14,175	274
Injuries	..	233	5,647	242
Senility	..	447	16,708	460
Other defined or ill defined diseases or disability	..	263	7,308	260
Diseases not specified	..	397	929	492
Total ..	..	<u>6,843</u>	<u>245,050</u>	<u>7,458</u>
				<u>247,169</u>

Night calls—visits between 8 p.m. and 8.30 a.m. .. .. .. .. 1,871 1,412

<i>Age Groups</i>		<i>Cases</i>	<i>Visits 1-24</i>	<i>Cases</i>	<i>Visits 25+</i>
0-4	..	89	642	4	289
5-14	..	121	837	11	394
15-44	..	619	4,884	131	9,054
45-64	..	1,133	9,236	572	56,112
65+	..	2,482	22,744	1,681	140,858
Total	..	<u>4,444</u>	<u>38,343</u>	<u>2,399</u>	<u>206,707</u>

Difficulty has been experienced in the recruitment of staff, particularly of trained staff. The group system of relief in certain areas was not possible, and the provision of relief for off duty and holidays was largely overcome with the willing help of the Area Superintendents.

Following the Ministry Report that a Course of District Training for Home Nurses and a National Certificate was necessary, Bristol was approved as a Training Centre and three Counties, through the Medical Officer, have approached us and satisfactory arrangements have been made for members of their staff to take the Course at the Bristol Training Home.

During the year 275 Students from the Bristol Royal Infirmary, Southmead, Homoeopathic and Childrens' Hospitals, accompanied members of our staff on a morning round.

The number of cases and visits paid show a decrease. This decrease could be due to a wider use in the oral administration of anti-biotics, leading to less requests for the administration of injection therapy.

There has been throughout the year, however, a continued increase in the requests for the nursing of the more protracted and heavy cases and the problem of adequate aids for "lifting" the more helpless and weighty.

The above is reflected in the fact that there were approximately 500 less cases referred by general practitioners, but approximately 200 more referred by hospitals, than in the previous year, and shown in the increase in the number of cases and visits to patients suffering from malignant diseases.

Talks have been given by the Superintendents to Student Nurses, newly appointed Staff Nurses at the Bristol Royal Infirmary, Womens' Organisations, Old Peoples' Associations, Toc.H., and various Church Groups.

Since the Local Authority assumed direct control of the Home Nursing Service and the subsequent change from Berkeley Square to the Central Health Clinic, more direct contact with other departments is possible.

### **Physiotherapy in the Maternal and Child Health Service**

Miss B. S. Hogg, and two part-time physiotherapists, Miss Rose and Mrs. McLaren, are, between them, responsible for the instruction in relaxation and ante-natal exercises given in all the pre-natal clinics in the City.

Miss B. S. Hogg reports on her work as follows:—

Ante-natal relaxation and exercise sessions are held in association with the parentcraft classes. The "cup of tea" in the interval between the two classes provides a valuable opportunity for discussion and mothers who perhaps would not ask questions during a class, will raise their problems at this time.

Post-natal exercises and Faradic treatment have continued to be arranged where necessary. Relaxation treatments are also given to patients referred from the sub-fertility clinic.

### *The Pre-School Child*

Cases of upper respiratory infection have been attending regularly for short wave, sunlight, breathing exercises and postural drainage, with satisfactory results. It has been possible to continue treatment of chest cases by breathing exercises and postural drainage at the William Budd Health Centre and other peripheral clinics, thus saving the mothers and children the journey into Central Clinic. Many mothers report that the common cold, which previously affected the child's chest, has not done so since regularly practising breathing exercises.

### **Home Help Service**

Miss M. R. Epplestone, Home Help Superintendent, reports:

During the year 3,759 families have been supplied with a home help compared with 3,539 in 1959. The number of home helps employed on 31.12.60 was 569, 10 full-time and 559 part-time.

The following types of cases have been helped—

Maternity (including home confinements, early discharges, expectant and nursing mothers)	..	..	..	..	..	..	..	..	230
Chronic sick, aged and infirm	..	..	..	..	..	..	..	..	3,120
Tuberculosis	..	..	..	..	..	..	..	..	22
Others	..	..	..	..	..	..	..	..	387

This year has seen the removal of the Home Help Department from Central Health Clinic to more spacious premises at 36 Queen Square. Changes have also taken place in the staff. The second Assistant Superintendent left in September and an appointment was made from the case workers, which left a vacancy in that section. This post was not easily filled. The Case Workers were re-designated "Supervisors".

Increasing demands are being made by all agencies, voluntary and statutory bodies, to supply help to more and more old and chronic sick people.

Many more calls are being made on the emergency side as the service is a dependable one, and more people are recognising this fact.

The number of maternity cases dealt with this year has also increased. As more mothers are being admitted to hospital for delivery only, and then returning home, the service has been made more flexible to meet the demand of putting help into the home to care for the children during that short period and continuing for the usual lying-in period. When possible, the help visits the mother before she is due to have her baby so that she can be introduced to the children and the husband. This has proved very satisfactory in the cases so far covered. Mothers have been amazed at the way the helps have handled so-called "difficult" children.

Emergency cases included acute sickness, post-operative, mental sickness and special families. The number of emergency cases tends to fluctuate throughout the year—most cases are in genuine need, although a few still think that the service is free and when the form is produced and read, miraculously remember they have relatives who would help them out.

Aged and chronic sick offer the real challenge to the service—how can we help the greatest number—their requirements range from half-hour daily for lighting fires to all day and then pass on to the night sitter-up. Fortunately, the latter does not often occur, home helps being such kindly people, they often prefer to return to these cases themselves, making their own arrangements with neighbours, and it is not until afterwards, that we hear of these arrangements.

The number of cases requiring help because of tuberculosis is decreasing yearly and is now 22.

Recruitment suffered a slight setback for a short time immediately following our departure from Central Health Clinic and dropped again at Christmas time, otherwise it remains good and we are able to be selective.

Talks given to various Women's Organisations often result in new applications for posts as home helps—many women not realising the variety and scope of the work.

We would like again to express appreciation to the general practitioners, almoners, midwives, health visitors and district nurses for their willing co-operation and helpfulness.

### Special Families

Work with special families is undertaken by the district health visitors, and by the team of Medical Officer (Dr. C. D. Hopkins), together with four health visitors, who are occupied full time in this field. In addition, a Family Service Unit team, consisting of the Organiser, Mr. Strange, with two women social workers, undertakes intensive work with families, on behalf of the Health Department.

Dr. C. D. Hopkins, 1st Assistant Medical Officer, Maternal and Child Health Service, reports:—

During 1960, there were 860 families considered to be in need of close supervision. The special team of 4 health visitors paid 6,280 domiciliary visits involving 4,444 households.

Much of the work of the team is carried out in conjunction with other social agencies, and therefore linked to the Area Co-ordinating Committees which were set up in 1956, and have been meeting at monthly intervals ever since. The agencies represented regularly at the meetings are Children's, Probation, Housing, Education and Welfare Services Departments, with representatives from the National Assistance Board, the Family Service Unit, and the National Society for Prevention of Cruelty to Children. Health Department representation includes public health inspectors, mental health officers and health visitors. At these meetings, workers exchange relevant information, and try to agree on common policy in the management of cases. It was thought that co-ordination of the social agencies would result in the numbers of persons visiting in the home being reduced. This has not been possible as a number of the agencies represented on co-ordination often have a statutory duty to visit, and it is not possible to delegate responsibility to any other body. However, as a result of frequent meetings, the workers are now more aware of each other's departmental policy, and consequently, the advice they give to families is more applicable to the various situations encountered in the home.

It is generally accepted that parental love will do much to compensate for the low standard of certain homes and great efforts are made to maintain the family units intact. At the same time, if children are likely to suffer as a result of the low home standards, workers should hesitate to help perpetuate such conditions. It is an important function of the Health Department representatives to interpret these social-medical situations to their non-medical colleagues so that full discussions can take place. During their five years' existence, Area Committees have considered 550 families and this procedure is not only achieving results in the interest of the children of the family, it is also proving to be an economy in welfare workers' time.

The special health visitors report: The number of domiciliary visits paid to families is no true measure of the work undertaken on their behalf. Extra domiciliary assistance is very varied and includes taking parents to keep their hospital appointments, or appointments with the National Assistance Board, or to see their general practitioners, sometimes even a shopping expedition is involved.

A major problem for families is that of obtaining furniture and furnishings without getting involved in unsuitable hire purchase commitments. For example, one family had hire purchase payments of £5 15s. 0d. weekly coming from an income of £7 10s. 0d. per week; the family consisted of father, mother and three school-age children.

The situation of the unsupported mother is another source of concern. In spite of material help provided by voluntary and statutory bodies, her income remains low in comparison with that of other family groups. Socially she remains very isolated and this is demoralising for the children as well as for herself.

We cannot say definitely that we have "cured" a family, but we ourselves are sure that some families who have been brought to our notice early in their problematic stage are helped to stand on their own feet. They often not only surprise us, but also themselves by coping with their difficult situations.

Mr. A. Strange, Organiser, Bristol Family Service Unit, reports:

The Unit provides a supportive casework service for a limited number of families in the Southmead, Horfield and Henbury area of the City. By limiting the field of activity and the number of families being helped at any given time the Unit workers are able to maintain close contact and establish friendly relationships with the parents. The function and purpose of the Unit service is to assist families with some of their more serious problems, and relieve some of the stresses which cause anxiety within the home, as well as encouraging better organisation and performance; and thus avoid community action which might involve the break-up of the family.

Often the Unit visits the family at the request of statutory or other services and during the past year referrals were received from a mental hospital, health clinic, prison welfare, industrial rehabilitation unit and approved school after-care. In addition, long term help was given to several families who had made a personal approach to the Unit for assistance. There were nine new referrals during the year and ten cases were closed, leaving the Unit in touch with 41 families at the end of December. Interviews and contacts with families (at home and at the Unit centre) totalled 3,657 and official contacts on behalf of families numbered 1,437. Of these figures, some 450 interviews and official enquiries were made on behalf of families or individuals who requested help with specific

problems. This use of the Unit service seems to indicate the need for an agency to provide advice or guidance to those families having problems of a less serious, or temporary, nature.

During the summer months, over 50 children were sent for holidays to the homes of private hosts in the south-west, and through arrangement with the Rotary Club and the W.V.S. Financial help received from the Lord Mayor's Voluntary Services Fund enabled the Unit to carry out this programme. It was felt that the holidays provided valuable social experiences for the children as well as being of considerable physical benefit.

In considering the areas of family life in which the Unit is able to bring about change, the marriage partnership itself is central to the life in the home. Of the 37 families in which both parents were present, 13 presented serious matrimonial problems; and, during the year, in 5 cases the parents separated for short periods, one resulting in a legal separation. Through continuity of contact and timing of visiting, the Unit worker is usually able to maintain a relationship with both parents, and thus facilitate consultation at times of tension.

In 11 cases the wives were living apart from their husbands and 2 were widows. Most of these were comparatively young wives left with large families to care for, and for whom the future held out little hope of relief from the day to day demands of the family. Generally their circumstances prevented them from improving their financial position and thus they were obliged to face several years existence on subsistence income. Many of them were glad to have the relationship with the Unit worker and appreciated the social and personal element in the contact.

Domestic help was given by the workers in a number of cases, but this was provided more as spontaneous offers of help in times of illness or other crises. Such help was of real educative value where the worker was able to follow-up and continue over a period. Assisting in sorting out the families' finances, coping with debts and encouraging regular payment of rent continue to demand the constant attention of the Unit worker. During the year, two families were evicted because of heavy arrears of rent, and in 17 cases the Unit was directly involved in this problem as a major one threatening the home.

A brief study of families helped during the past few years seems to indicate that the family tends to be referred to the Unit when the pressures on the organisation inside the home are at their greatest i.e. when there are three or more children under five at home. Nursery placement often eases the strain for the mother, who may be in poor physical condition, and quite unable to cope with two or three children at the stage when they need training and guidance in social behaviour in the home. Consequently standards and conditions deteriorate, and may even cause community concern, although later developments point to underlying strengths and abilities which had been taxed to breaking point at a certain stage. Although it is difficult to assess or predict future development, the Unit's experience seems to indicate that some of the larger families are able to cope quite well if assistance of a practical and tangible nature is available in an acceptable form at the right time.

A number of children have been helped directly by the Unit, either through individual contact or in small groups. Normally the children are selected for special reasons, e.g. behaviour problems, absentee father . . . and wherever possible the contact is continued over a period, sometimes as long as two years. This work, which is ancillary to the main contact with the child's home, is

always arranged with the consent and interest of the parents. Frequently the relationship with the Unit is linked up with the psychiatric help being given through the local Family and Child Guidance Service.

One problem which affects the lives of many of the families is that of their limited articulation and their doubts regarding their ability in expressing themselves when seeking help with problems especially those of the more personal and intimate nature concerning relationships within the home. This inhibition has been referred to by a number of parents, and from their own comments it would appear that the informality and permissiveness of the Unit service, as well as the accessibility and identification with the local community, has helped to convey an impression of sympathetic understanding of their point of view.

The Unit has continued to benefit from the services of Mrs. F. Bodman (psychiatric social worker) who has been available for consultation on some of the more difficult problems in the casework, and, as in previous years, the Unit has received valuable support from officers and fieldworkers in both the statutory and voluntary services.

### **Welfare of Unmarried Mothers**

Reference has already been made to the rise in illegitimacy this year and the increasing incidence among very young girls, i.e. those under sixteen years of age.

During 1960, Miss M. Reed, Welfare Officer to the Maternal and Child Health Section, gave help and advice to 657 unmarried mothers. Of these, 458 were in respect of a first illegitimate baby, 111 of a second illegitimate baby, and in one case the girl was found not to be pregnant. The remaining 87 were in respect of a third or more illegitimate baby, although in the majority of these cases, the parties were cohabiting.

Miss Reed comments "There has been a general increase in applications coming from every section of the community. The most noticeable trend in the work during the year has been the increase in the number of girls in the younger age group. Restlessness causing constant change of accommodation and change of work still persists. Much help has been forthcoming from employing bodies in the City and the help of the day nurseries is as invaluable as ever".

Dr. Marjorie Mair holds an evening ante-natal clinic for unmarried mothers. Dr. Mair also acts as Medical Officer to Snowdon Road Mother and Baby Home, and advises on the care of the babies in St. Raphael's Home and Hostel, thus providing continuity of medical care.

During 1960 47 mothers were admitted into our Mother and Baby Home, Snowdon Road, and 14 mothers were admitted into voluntary Homes.

## STATISTICS

**Table I—Maternal and Child Health**

Live births (Bristol mothers—from Birth Registrations)	..	..	..	6,889
Live birth rate	..	..	..	15.88
Stillbirths (Bristol mothers—from Birth Registrations)	..	..	..	101
Stillbirth rate per 1,000 total (live and still) births	..	..	..	14.45
Total births (live and still)	..	..	..	6,990
Infant deaths	..	..	..	136
Infant mortality rate per 1,000 total live births	..	..	..	19.74
Legitimate infant mortality rate per 1,000 legitimate live births	..	..	..	19.40
Illegitimate infant mortality rate per 1,000 illegitimate live births	..	..	..	25.40
Illegitimate percentage of live births	..	..	..	6.3%
Neo-natal mortality rate (deaths under 4 weeks per 1,000 total live births)	..	..	..	14.37
Early neo-natal mortality rate (deaths under 1 week per 1,000 total live births)	..	..	..	12.63
Perinatal mortality rate (stillbirths + deaths under 1 week combined per 1,000 total live and stillbirths)	..	..	..	26.90
Maternal deaths (including abortion)	..	..	..	1
Maternal mortality rate per 1,000 total live and stillbirths	..	..	..	0.143
Number of live premature births	..	..	..	471
Number of live and still births at home (from birth notifications)	..	..	..	1,788
Number of live and still births in institutions (from birth notifications)	..	..	..	5,364

(The above figures relate to Bristol residents)

*Clinic attendances*

		New Patients	Total Attendances
(a) <i>Ante-Natal</i>			
(i) Medical officers' sessions	..	779	5,604
(ii) General practitioners' sessions	..	3,593	25,589
(iii) Consultant sessions	..	3,486	6,923
(iv) Midwives' sessions	..	346	5,542
(b) <i>Post-Natal</i>			
Medical officers and general practitioners		3,601	4,651
(c) <i>Child Health Clinics</i>			
(i) Total number of infants under 1 year	..	..	5,502
Total attendances of infants	..	..	57,949
(ii) Total number of children 1—5 years	..	..	11,141
Total attendances of children 1—5 years	..	..	26,990
(d) <i>Parentcraft Classes</i>			
(i) Mothercraft	..	..	7,867
(ii) Relaxation and exercises	..	..	8,208
(e) <i>Special Diagnostic Clinic</i>			
(i) New patients	..	..	327
(ii) Attendances	..	..	732
<i>Health Visiting</i>			
Home Visits—Ante-Natal	..	..	1,861
Primary (new babies)	..	..	7,827
Infants under 1 year (excluding primary visits)	..	..	37,160
Children, 1—5 years	..	..	63,210
Sessions Attended—Clinics	..	..	5,358
Nursery Schools and Classes	..	..	1,468 hours
<i>Recuperative Convalescence</i>			
Mothers accompanied by children	..	..	26 mothers 51 children
Unaccompanied children admitted to Jan Smuts Home	..	..	24
Adults (including 143 over 65 years)	..	..	205
<i>Welfare of Unmarried Mothers</i>			
Number admitted to Snowdon Road Home	..	..	47
Number admitted to other Mother and Baby Homes	..	..	21

**Table 2—X-Ray Section**

The following are the numbers of X-rays carried out at the Central Health Clinic during 1960:

*School Health Service*

Referred from Minor Ailment Clinics, etc.	..	..	..	327
<b>Referred by consultants:</b>				
E.N.T.	..	..	..	553
Orthopaedic	..	..	..	133
				686
Teachers' periodic X-Rays of chest	..			613

*Tuberculosis Service:*

Adult contacts	..	..	..	310
Child contacts	..	..	..	485
Children inoculated with B.C.G.	..			2,768
				3,563

*Maternal and Child Health Service:*

Children	..	..	..	16
Mothers—X-Rays of chest	..			3,684
Mothers—X-Rays of abdomen	..			141
				3,841

Staff Medical Examinations and Periodic X-Rays (excluding Teachers)	..			2,924
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Miscellaneous	..	..	..	153
Total No. of Films taken	..			12,107
Total No. of Persons X-Rayed	..			11,212

**Table 3—Dental Treatment**

	Examined	Requiring Treatment	Treated	Made Dentally Fit
Expectant and nursing mothers	781	770	671	535
Children under 5	..	1,065	1,020	981
	Scalings and Gum treatment	Fillings	Silver Nitrate	Crowns or Inlays
Expectant and nursing mothers	273	919	13	3
Children under 5	..	—	727	—
	Extractions Anaesthetics	General Anaesthetics	Full upper or lower	Dentures Partial
Expectant and nursing mothers	1,212	214	101	70
Children under 5	..	1,783	809	—
			X-rays	
Expectant and nursing mothers				28
Children under 5				—

Table 4—Inoculations

		1959	General Practitioners	Total	Local Authority	1960	General Practitioners	Total
<i>Diphtheria (whether combined with Whooping Cough and/or Tetanus or not)</i>								
Full Course:	Under 5 years of age	..	..	3,413	2,073	5,486	3,477	5,761
	Between 5 and 15 years of age	..	..	65	46	111	201	553
	Booster dose:	Under 15 years of age	..	977	779	1,756	6,998	9,634
<i>Whooping Cough (whether combined with Diphtheria and/or Tetanus or not)</i>								
Full Course:	Under 5 years of age	..	..	3,378	2,078	5,456	3,465	5,736
	Between 5 and 15 years of age	..	..	51	35	86	176	471
	Booster dose:	Under 15 years of age	..	808	699	1,507	1,815	3,857
<i>Tetanus (whether as Tetanus-Diphtheria-Whooping Cough Triple Vaccine or not)</i>								
Full Course:	Under 5 years of age	..	..	3,364	1,816	5,180	3,475	5,587
	Between 5 and 15 years of age	..	..	54	61	115	188	570
	Booster dose:	Under 15 years of age	..	..	214	415	629	1,016
<i>Diphtheria Immunisation (whether combined with Whooping Cough and/or Tetanus Immunisation or not)</i>								
Six months ended 30th June	..	..	..	2,668	49	2,717	2,620	2,683
Six months ended 31st December	..	..	..	2,818	62	2,880	3,141	3,631
<i>Whooping Cough Immunisation (whether combined with Diphtheria and/or Tetanus Immunisation or not)</i>								
Six months ended 30th June	..	..	..	2,652	31	2,683	2,617	2,678
Six months ended 31st December	..	..	..	2,804	55	2,859	3,119	2,529

**Table 5—Smallpox Vaccination**

Age at time of Vaccination	Number of persons vaccinated (or re-vaccinated)			
	1959	1960	1959	1960
Under 1 year ..	2,130	224	1,700	110
1— .. ..	270	30	490	25
2— .. ..	134	38	314	33
5— .. ..	147	62	262	47
15 years and over ..	156	259	229	287
Totals ..	<u>2,837</u>	<u>613</u>	<u>2,995</u>	<u>502</u>

**Table 6—Vaccination against Poliomyelitis***During 1960:—*

Year of Birth	Primary Courses	Booster
1955-1960 ..	5,293	7,142
1944-1954 ..	677	5,268
1933-1943 ..	3,435	16,699
Before 1933 ..	<u>13,871</u>	<u>6,325</u>
Totals ..	<u>23,276</u>	<u>35,434</u>

*Since Inception of Poliomyelitis Vaccination:—*

1955-1960 ..	25,013	15,971
1944-1954 ..	67,888	54,568
1933-1943 ..	41,387	29,705
Before 1933 ..	<u>18,968</u>	<u>7,992</u>
Totals ..	<u>153,256</u>	<u>108,236</u>

## THE MENTAL HEALTH SERVICES

Dr. H. Temple Phillips

(*Chief Assistant Medical Officer of Health and Senior Medical Officer for Mental Health*)

and

F. Morton  
(*Mental Health Officer*)

### Introduction

On the 1st November, 1960, the provisions of the *Mental Health Act, 1959*, were implemented in full.

The introduction of the Act reads as follows:— “An Act to repeal the *Lunacy and Mental Treatment Acts*, 1890 to 1930, and the *Mental Deficiency Acts*, 1913 to 1938, and to make fresh provision with respect to the treatment and care of mentally disordered persons and with respect to their property and affairs; and for purposes connected with the matters aforesaid.”

Those Acts which have thus been repealed formed the basis of mental health legislation for very many years—they were good Acts, planned with considerable thought and foresight, but they had seen their day. They included many provisions for the protection of patients, but they were principally designed, as were our original mental hospitals, to provide custody and restraint and to protect the community. They were drafted at a time when means of treatment were few and ineffective, and when no one could possibly foresee the developments which were to take place in the study, prevention and treatment of mental disorder, or the rapid growth in the public understanding and acceptance of this problem.

The 1st November, 1960, marks the commencement of a new era, and mental disorder has now been brought into line with physical disorder. We can anticipate that our psychiatric hospitals will be considerably reduced in size but will be much more actively therapeutic. The way is now open for the creation of more Day Hospitals and Treatment Centres, and we can look forward to the time when the majority of mentally disordered patients will be treated successfully in the community without being exposed to the risk of “institutionalisation”, and without having to suffer from a disruption of their employment and social security.

The Mental Health Service of the future will undoubtedly be a live and all-embracing one. The principal authorities active in the field will probably remain the Regional Hospital Boards and the Local Health Authorities, between whom the closest co-operation must exist, but there will also be an important place in the scheme for many other statutory, social, and voluntary agencies, each with a contributory part to play.

### *The Changing Aspects of the Community Mental Health Service*

The sweeping changes brought about by the repeal of the Lunacy, Mental Treatment, and Mental Deficiency Acts, and the introduction of the *Mental Health Act, 1959*, will result in greater flexibility and considerable expansion of the Local Health Authority's Mental Health Service.

During 1960, amended proposals of the Bristol City Council for the provision of this service were submitted to the Minister, as directed by him in Circular 28/59.

The following is an outline of some of the principal changes in legislation, together with an indication of the way in which the Mental Health section of the Local Health Authority proposes to deal with problems associated with mental disorder in the community.

A number of the terms used in the repealed Acts were unsuitable for everyday use, and were generally regarded as objectionable. With the full operation of the *Mental Health Act*, the terms "Mental Deficiency", "Mental Defective", "Idiot", "Imbecile", and "Feeble-minded" have become obsolete, and the rigid distinctions previously drawn between mental illness on the one hand and mental deficiency on the other, have been removed. "Mental Disorder" is introduced as a term covering all forms of mental ill health, and four main categories of mentally disordered patients will be recognised, i.e., those suffering from mental illness, severe subnormality, subnormality and psychopathic disorder.

The two groups subnormality and severe subnormality together cover the range of disorders previously included in the term Mental Deficiency.

The term "psychopathic disorder" is defined as "a persistent disorder or disability of mind (whether or not including subnormality of intelligence) which results in abnormally aggressive or seriously irresponsible conduct on the part of the patient, and requires or is susceptible to medical treatment."

These classifications are contained within Part I of the *Act* which, in addition, decrees the dissolution of the Board of Control, whose functions are transferred partly to the Ministry of Health, partly to Local Health Authorities, and partly to Mental Health Review Tribunals. Other important provisions of Part I of the *Act* include the setting up of these Tribunals and permit any hospital or mental nursing home to receive, on an informal basis, patients who are not unwilling to be so admitted.

Part II of the *Act* deals with Local Health Authority services. It extends the provisions of the *National Health Service Act 1946*, the *National Assistance Act, 1948*, and the *Children Act, 1948*, so that relevant sections of these *Acts* will have effect in relation to persons who are, or who have been, suffering from mental disorder, and allows for the provision of residential accommodation by both the Welfare Authority and the Children's Authority. It amends the *Education Act, 1944*, by revising the procedures for classifying children as being unsuitable for education, and by repealing Section 57 (5) of the *Education Act* which formerly made provision for the referral of children to the Local Health Authority on leaving school. It also gives the Local Authority the power to compel the attendance at Training Centres of children of compulsory school age who have been excluded from school, and who are not receiving adequate training elsewhere.

In Bristol, consultations have taken place between the Local Health Authority, the Welfare Authority, the Children's Authority and the Education Authority with a view to establishing a policy, and apportioning responsibility for the carrying out of duties imposed by the *Mental Health Act*.

Although Statutory Supervision by the Local Health Authority has now been superseded by Informal Supervision, steps will be taken to ensure that all possible help and advice are provided for children excluded from school and to their parents or guardians. In the case of those children leaving special schools or special classes in ordinary schools, where a need exists for help after leaving school, careful consideration will continue to be given to the limitations and requirements of the child at School Leavers' Conferences, and the Mental Health Section will arrange for friendly guidance to be given.

The Local Health Authority will ensure that an adequate number of places are made available in Junior and Adult Training Centres. The new Training Centre at Hengrove is about to be commenced and should be ready for occupation in two years' time. When these premises are completed, provision will become available for very young and severely physically handicapped children who cannot be accepted for training at Marlborough House, and residential accommodation will be provided for short and long term care. In addition, hostels and other accommodation for the mentally disordered will be established as and when required.

Part III provides for the registration and inspection of "mental nursing homes", i.e., premises used or intended to be used for the reception of, and provision of nursing or other medical treatment for, one or more mentally disordered patients, whether exclusively or in common with other persons, and "residential homes for mentally disordered persons", i.e., establishments the sole or main object of which is, or is held out to be, the provision of accommodation, whether for reward or not, for persons suffering from mental disorder.

A review has been undertaken of all premises believed to fall within the above categories, and consideration is being given to registration where applicable.

Part IV of the *Act* deals with methods of compulsory admission to hospital, and provides for three main procedures:—

- (a) Admission for observation for a maximum period of 28 days (Section 25)
- (b) Admission for treatment (Section 26)
- (c) Admission for observation in cases of emergency for a period of not more than 72 hours (Section 29)

A summary of procedure for admission to hospital was drawn up by officers of the Mental Health Section and printed copies were distributed to all doctors and hospitals in the City. A copy of this summary is set out on pages 30, 31 and 32.

**MENTAL HEALTH ACT, 1959****Summary of Procedure for Admission to Hospital**

<i>INFORMAL ADMISSION Section 5 (b)</i>	<i>ADMISSION FOR OBSERVATION Section 25 (c)</i>	<i>ADMISSION FOR TREATMENT Section 26 (d)</i>	<i>ADMISSION FOR OBSERVATION IN CASE OF EMERGENCY Section 29 (e)</i>
<i>1. Person having power to make application for the admission of the patient into hospital.</i>	Not applicable.  As from 6th October, 1959 any patient who is <i>not unwilling</i> to be admitted and can suitably be treated without powers of detention, may be admitted informally in the same way as patients are admitted to general hospitals.	<i>The Nearest Relative of the patient or The Mental Welfare Officer of the Local Health Authority.</i>  <i>The Mental Welfare Officer of the Local Health Authority that he objects to the application being made.</i>	<i>The Nearest Relative of the patient or The Mental Welfare Officer of the Local Health Authority.</i>  Providing that the nearest relative of the patient has not notified the Mental Welfare Officer or the Local Health Authority that he objects to the application being made.
		<i>The Mental Welfare Officer must consult the nearest relative of the patient unless to do so would involve unreasonable delay.</i>	<i>Every emergency application shall include a statement (to be verified in the medical recommendation) to the effect that it is of urgent necessity for the patient to be admitted and detained and that compliance with the provisions set out in Columns (c) and (d) would involve undesirable delay.</i>

(N.B. No application for the admission of a patient shall be made by any person who has not personally seen the patient within a period of 14 days ending with the date of the Application).

Applications to be addressed to the Managers of the hospital to which admission is sought and to specify the qualification of the Applicant to make the application.

(N.B. No application for the admission of a patient shall be made by any person who has not personally seen the patient within a period of 3 days ending with the date of the Application).

Any person suffering from Mental Disorder being

- In the case of a patient of any age*  
Mental illness or severe subnormality
- In the case of a patient under the age of 21 years*  
Psychopathic disorder or Subnormality.

Providing that the disorder is of a nature or degree which warrants the detention of the patient in hospital for medical treatment

*AND* that it is necessary in the interests of the patient's health or safety, or for the protection of other persons, that the patient should be so detained.

### Summary of Procedure for Admission to Hospital—continued

	<i>INFORMAL ADMISSION Section 5 (b)</i>	<i>ADMISSION FOR OBSERVATION Section 23 (c)</i>	<i>ADMISSION FOR TREATMENT Section 26 (d)</i>	<i>ADMISSION FOR OBSERVATION IN CASE OF EMERGENCY Section 29 (e)</i>
3. Requirements as to Medical Recommendations.	No formal medical recommendation required.	<p><i>Two written recommendations of two medical practitioners in the prescribed form.</i></p> <p><i>Both recommendations to include a statement that in the opinion of the practitioner the conditions set out in (2) above are complied with.</i></p> <p><i>Recommendations may be given separately or as a joint recommendation signed by two medical practitioners.</i></p>	<p><i>Two written recommendations of two medical practitioners in the prescribed form.</i></p> <p><i>Both recommendations to include a statement that in the opinion of the practitioner the conditions set out in (2) above are complied with.</i></p> <p><i>Also to include particulars of the grounds for that opinion and to specify whether other methods of dealing with the patient are available and if so why they are not appropriate.</i></p> <p><i>Recommendations may describe the patient as suffering from more than one form of mental disorder providing that at least one of the forms of mental disorder is common to both certificates.</i></p>	<p><i>ONE written medical recommendation given in the prescribed form. To be given, if practicable, by a medical practitioner having previous acquaintance with the patient.</i></p> <p><i>Medical recommendation to include verification of the fact that it is of urgent necessity for the patient to be admitted and detained and that complainant relating to "Admission for observation" or "Admission for treatment" would involve undesirable delay.</i></p>

Where the recommendation is made on the grounds that the patient is suffering from psychopathic disorder or subnormality and no other form of mental disorder, the age of the patient must be stated.

Recommendations may be given separately or as a joint recommendation signed by two medical practitioners.

Medical recommendations must be signed on or before the date of the Application for Admission.

Medical Practitioners must have personally examined the patient either together or at an interval of not more than seven days.

Medical recommendation to comply with the general requirements set out in Columns (c) and (d) so far as is applicable to a single recommendation.

Of the medical recommendations given for the purpose of an application for admission, *ONE* shall be given by a practitioner approved for the purpose by the local health authority, and unless that practitioner has had previous acquaintance with the patient, *the OTHER* shall be given, if practicable, by a practitioner who has such previous experience.

*ONE*, but not more than one, of the recommendations may be given by a practitioner on the staff of a hospital to which the patient is to be admitted (except when the patient is to be accommodated as a private patient, or in a mental nursing home).

Medical recommendations may not be given by:—The Applicant for the Admission, any professional associate of the applicant or of the practitioner giving the other medical recommendation, any person having an interest in the receipt of payments on account of maintenance of the patient, nor by any close relative of the patient or of any of the persons mentioned above.

## Summary of Procedure for Admission to Hospital—continued

<i>INFORMAL ADMISSION Section 5 (b)</i>	<i>ADMISSION FOR OBSERVATION Section 25 (c)</i>	<i>ADMISSION FOR TREATMENT Section 26 (d)</i>	<i>OBSERVATION IN CASE OF EMERGENCY Section 29 (e)</i>
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### 4. Effect of Action.

An application for admission duly completed in accordance with the requirements set out above and founded upon the necessary medical recommendation(s) shall be sufficient authority for the applicant, or any person authorised by the applicant, to take the patient and convey him to the hospital at any time within the following period:—

14 days beginning with the date on which the patient was last examined by a medical practitioner before giving a recommendation for the purposes of the application.

The application shall be sufficient authority for the managers to detain the patient in the hospital.

### 5. Duration of Authority.

A period of *NOT exceeding 28 days* beginning with the date of admission, unless before the expiration of that period he has become liable to be detained by virtue of a subsequent application, order or direction under some other provision of the Act.

N.B. Except that where an application has been made under the provisions of Section 52 for transferring the functions of the nearest relative of the patient the detention period can be extended in any case (a) until the Section 52 application has been finally disposed of and (b) if any order is made transferring the function of the nearest relative for a further period of seven days.

An initial period of *not exceeding one year* beginning with the date of admission.

Authority for detention may then be renewed

- (a) for a further period of *one year* and
- (b) from the expiration of any period of renewal for a further period of *Twelve years, and so on* for periods of two years at a time.

N.B. The patient may apply to a Mental Health Review Tribunal within the period of six months beginning with the date of admission or with the date on which he attains the age of 16 years whichever is the later.

Where it is intended to extend the authority for the detention of a patient who has attained the age of 16 the Managers must inform the patient accordingly and the patient may then apply to a Mental Health Review Tribunal.

A patient who is subject to be detained by virtue of an application for admission for treatment as a psychopathic or subnormal patient shall cease to be so liable on attaining the age of 25 years. Unless the responsible medical officer is of the opinion that the patient would be likely to act in a manner dangerous to himself or to other persons if discharged. In the event of such further detention the Managers must advise the patient and the nearest relative accordingly and an appeal can be made to a Mental Health Review Tribunal within a period of 28 days beginning with the date on which the patient attains the age of 25 years.

The above summary of the provisions of the MENTAL HEALTH ACT, 1959, is designed for easy reference and general guidance only.

A Schedule of Mental Welfare Officers appointed in accordance with Section 6 of the Act is available on request. These officers can provide any statutory forms required in association with admission to hospital. They can advise on procedure and they are able to supply a list of medical practitioners approved by the local health authority under the provisions of Section 28 of the Act. Mental Welfare Officers can also give information on the facilities provided by the local authority community mental health service.

It will be noticed that the Magistrates will not in future have any part to play in the compulsory admission of mentally disordered patients to hospital. The view was expressed by the Royal Commission on the Law Relating to Mental Illness and Mental Deficiency that this function should be the responsibility of suitably qualified medical practitioners and this policy has been incorporated in the *Mental Health Act*. Many will regret that the Justice of the Peace will no longer enter into this aspect of mental health work. In Bristol, a panel of Magistrates have devoted a great deal of time to dealing with mental health problems, and their experience and sound judgment contributed considerably to the successful operation of the former legislation.

Mental Welfare Officers in Bristol are now working as a team with consultant psychiatrists. They are attending psychiatric out-patient clinics and hospital case conferences, and are responsible for arranging the majority of admissions to psychiatric hospitals. They are providing social care and after-care for many patients in the City, and it is hoped that ultimately there will be still further integration of hospital and Local Health Authority social workers so that patients may receive the continuous attention of one social worker through all phases of their illness.

This part of the *Act* also provides for guardianship. It is anticipated that many patients will be placed under the guardianship of the Local Authority, or that the Local Authority will be responsible for approving the appointment of private individuals as guardians. The guardianship system in the future is expected to differ from that of the past, in that it may well be used as an alternative to hospital care, and its provisions are now extended to mentally ill persons as well as to subnormal and severely subnormal patients. The operation of the sections of the *Act* relating to guardianship will undoubtedly add considerably to the responsibilities and volume of work of the Mental Health Section.

Part V of the *Act* deals with the admission to hospital and guardianship of patients concerned in criminal proceedings, and the transfer of patients under sentence.

Other parts of the *Act* are concerned with removal to and from Scotland and Northern Ireland, and with the provision of institutions for treatment under conditions of special security.

Part VIII of the *Act* lays down procedures for the management of property and affairs of patients, and will ensure the continuation of arrangements which have hitherto been in operation.

The miscellaneous and general provisions in Part IX of the *Act* provide details of powers and proceedings of Mental Health Review Tribunals, and the First Schedule of the Act is devoted to the constitution of these Tribunals.

## Organisation and Staff

The Health Committee of the Council is responsible for the control of the Mental Health Services, and has established a Mental Health Sub-Committee.

The Medical Officer of Health is responsible to the Health committee for the organisation and control of the Mental Health Service. To assist him in this work he has the services of a Medical Director (the Chief Assistant Medical Officer of Health) and of the following medical and non-medical staff.

<i>Medical</i>		<i>Establishment</i>	<i>Present Staff</i>	<i>Whole or part time</i>
*Senior Consultant Psychiatrist	..	..	1	1
*Consultant Psychiatrists	..	..	2	2
<i>Non Medical</i>				
Mental Health Officer	..	..	1	1
Deputy Mental Health Officer	..	..	1	1
Mental Welfare Officers	..	..	6	6
Assistant Mental Welfare Officers	..	..	4	4
*Senior Psychiatric Social Worker	..	..	1	1
*Psychiatric Social Workers	..	..	6	3
*Psychiatric Social Worker	..	..	1	1
*Senior Educational Psychologist	..	..	1	1
*Educational Psychologists	..	..	5	5
Senior Clerk	..	..	1	1
Clerical Assistants	..	..	3	3
Secretary	..	..	1	1
*Clerical Assistant	..	..	1	1
Shorthand Typist	..	..	1	1
*Shorthand Typist	..	..	4	4

\*Employed in Child and Family Guidance Service (joint service with Local Education Authority).

#### *Junior and Adult Training Centres*

Training Centre Supervisor	..	..	1	1	whole time
Training Centre Assistant Supervisors	..	11	11	" "	
Psychologist	..	..	1	1	part time
Speech Therapists	..	..	3	3	" "
Teacher of the Deaf	..	..	1	—	" "
Nursing Sister	..	..	1	1	" "
Industrial Centre Supervisor	..	..	1	1	whole time
Male Adult Training Centre Instructors	..	4	4	" "	
Occupational Therapists	..	..	2	1	" "
Caretaker	..	..	1	1	" "
Domestic Helpers	..	..	4	4	part time
Guides	..	..	7	7	" "
Cleaners	..	..	3	3	" "

#### *Staff Changes*

With the repeal of the *Lunacy and Mental Treatment Acts 1890 to 1930*, and the *Mental Deficiency Acts 1913 to 1938*, and the introduction of the *Mental Health Act 1959*, it was necessary to terminate the appointment of the two certifying medical practitioners, but both doctors have been approved for the purpose of carrying out duties under the *Mental Health Act*, and an adequate number of additional medical practitioners with special experience in the diagnosis or treatment of mental disorder have also been approved for this purpose.

On the 11th April, 1960, Miss M. J. McNaught who had previously acted as Health Visitor for Mental Health After-Care at the Day Centre at Barrow Hospital, was appointed to the vacant post of Mental Welfare Officer.

Other minor changes took place in the Clerical and Training Centre staffs during the year, and all vacant posts have been filled.

### Courses and Conferences

The annual conference of the National Association for Mental Health was held in London on the 24th and 25th March. This was attended by the Chairman of the Mental Health Sub-Committee, the Chief Assistant Medical Officer of Health, and the Mental Health Officer. The theme of the conference was "Mental Health at Home and Abroad."

The Deputy Mental Health Officer and the Supervisor of the Training Centre attended the Annual Conference of the Federation of Associations of Mental Health Workers at Torquay from the 1st to 4th April.

On the 26th May, a One-Day Conference on Psychiatric Social Work was held at Barrow Hospital, and was attended by all available officers of the mental health section.

The Mental Health Officer, at the invitation of the National Association for Mentally Handicapped Children, toured Holland to study the Dutch mental health service from the 6th to 12th June.

From the 13th to 17th June, two Assistant Mental Welfare Officers attended the Refresher Course for Mental Health Workers at Dillington House, Ilminster, organised by the Somerset Local Health Authority.

"The Community Care of the Mentally Handicapped" was the subject of the National Society for Mentally Handicapped Children's National Conference in London held on the 14th, 15th and 16th July. The Deputy Mental Health Officer attended, being sponsored by the Bristol and District Society for Mentally Handicapped Children.

On the 18th, 19th and 20th November, the Mental Health Officer attended the Association of Psychiatric Social Workers' Conference at High Leigh, Hoddesden, Hertfordshire. This conference dealt with the relationship between social working staffs of mental hospitals and local authorities.

On the 1st December the Chief Assistant Medical Officer of Health attended a One-Day Conference arranged by the National Association for Mental Health in London, the subject of which was "Hostels for Mentally Disordered Patients".

Two members of the Training Centre staff enrolled for the Diploma Course for Teachers of the Mentally Handicapped (September 1960 to July 1961). One member was forced to retire from the course owing to illness on the 31st December, 1960.

In-service training of Assistant Mental Welfare Officers has continued to be carried out within the Department.

During the year the Supervisor of the Training Centre obtained the diploma of the St. Nicholas Training Centre in Montessori training, and has been granted an associate membership.

As in previous years, many students, including post-graduate students, medical students, social science students and those from training colleges, as well as many visitors from home and overseas, have visited the Training Centres.

The Mental Health Officer and his Deputy have continued to provide numerous talks and lectures to organisations throughout the City.

### Subnormality and Severe Subnormality

At the end of 1960, the number of subnormal and severely subnormal persons known to the Local Authority was 1,800. This represents a total of 4·1 per 1,000 of the estimated population—a similar figure to that in 1959. The following table shows details of the numbers of such persons under care since 1949.

Year	In Hospital and on Extended Leave	Informal Supervision	Under Guardianship	Receiving Voluntary Aftercare	Pending Action
1949	676	736	65	72	29
1950	678	804	56	116	24
1951	685	857	54	147	17
1952	670	876	43	210	15
1953	665	932	51	105	58
1954	657	972	46	113	59
1955	669	1013	42	116	47
1956	678	962	40	91	24
1957	683	911	41	107	30
1958	704	923	12	125	38
1959	703	908	10	125	35
1960	716	926	9	137	12

During the period up to 31st October, 1960, 81 cases were referred from the following sources:

		M.	F.	Total
General Practitioners	..	2	3	5
Courts	..	1	—	1
Local Education Authority	..	35	19	54
Other sources	..	12	9	31
Totals	..	50	31	81

They were dealt with in the following manner:

Admitted to hospital	..	..	6	6	12
Placed under Supervision	..	..	31	21	52
Action not yet taken	..	..	8	4	12
Action found to be unnecessary	..	..	4	—	4
Died before action could be taken	..	..	1	—	1
Totals	..	..	50	31	81

#### *Waiting List*

At the commencement of 1960 there were 30 names on the list of persons awaiting admission to mental subnormality hospitals and during the course of the year 24 names were added. Of this total of 54, 20 were admitted to hospital, 2 died and in 8 cases admission became unnecessary. This left a total of 24 awaiting admission at December 31st, 1960.

In addition to the 20 patients admitted to hospital from the waiting list, it was necessary to admit a further 29 as a matter of urgency, making a total of 49 admissions during the period ending 31st October, 1960. The following table shows the method of admission.

		M.	F.	Total
Informal	..	22	14	36
Section 3 of M.D.A. 1913	..	1	4	5
Section 6 of M.D.A. 1913	..	2	3	5
Section 8 of M.D.A. 1913	..	3	—	3
Totals	..	28	21	49

Temporary care under the provisions of Ministry of Health Circular 5/52 was arranged in 63 cases, as follows:—

		<i>M.</i>	<i>F.</i>	<i>Total</i>
At Stoke Park Hospital ..	..	10	13	23
At Hortham-Brenty Hospital ..	..	20	16	36
Others .. .. ..	..	2	2	4
<b>Totals .. .. ..</b>		<b>32</b>	<b>31</b>	<b>63</b>

Difficulty in admission has once again been experienced, particularly with regard to young children and adult males, but it has been possible in many instances to arrange attendance at Assessment Clinics, and subsequent treatment recommended by the consultant psychiatrist to the general practitioner has often resulted in alleviation of many of the problems and avoidance of admission to hospital.

#### *Assessment Clinics*

##### *(Dr. Heaton Ward's Clinic)*

During the period under review, 32 new patients have been referred for assessment and 42 patients have been followed up. Close liaison by letter has been maintained with general practitioners in every case.

In all cases, appointments have been made at the request of Bristol or some other Local Health Authority, and a disappointing feature has been that no cases have been referred direct to the clinics by general practitioners. It would appear that they have not yet come to regard the clinic as comparable with out-patient clinics in other branches of medicine, to which they no doubt refer cases.

Cases have been accepted with a view to treatment, for example, behaviour disorders, epilepsy, and nocturnal enuresis, and encouraging results have been obtained, although it has been necessary in some cases to admit patients to a mental subnormality hospital for further treatment on a short term basis. However, the fact that each Consultant holds a clinic only once a month has inevitably reduced the effectiveness of the treatment. It is readily recognised by all those working in the clinics that their frequency should be increased to once a fortnight at least, possibly ultimately to once a week, but this is impossible at present with the existing Consultant establishments in the psychiatric hospitals which staff them.

##### *(Dr. W. Lumsden Walker's Clinic)*

Part of the Assessment Clinic for Mental Subnormality is run by kind invitation of, and with the co-operation of, the Local Authority on their premises, and again a part of these services is staffed by the Hortham-Brenty Hospital Group (South Western Regional Hospital Board) and by the Social Welfare and Mental Welfare Officers from both Hospitals and Local Authority. The Hospital provides the medical staff for the clinic, which is held monthly, and during the period under review, 38 new cases have been seen and 27 patients seen for follow-up.

The Assessment Clinic has proved of great value, not only to Local Authority medical staff, but to general practitioners and other Consultants. In many cases it has been necessary to arrange the admission of these patients to hospital but in many other cases it has been possible by means of out-patient care, to keep the patients within their own homes because of this medical cover. More

patients have been helped by discussion of their problems and in almost all cases parents have been helped by discussion of problems. Advice can be given readily to Mental Welfare Officers and medical investigations both for clinical and research purposes can be carried out. Medication given to patients for whom the general practitioners wish advice, has helped to control anomalies of behaviour and relieve the strain on the home.

### **Junior and Adult Training Centres**

At the end of the year the total number of patients on the register (277) was as follows:—

	<i>Male</i>		<i>Female</i>	
	<i>Under 16</i>	<i>Over 16</i>	<i>Under 16</i>	<i>Over 16</i>
Junior Training Centre .. ..	71	—	54	—
Adult Training Centre .. ..	—	89	—	63

There was an average daily attendance of 227.

### *Medical Care*

The regular routine medical and dental inspections and vaccinations against poliomyelitis have been carried out on both adults and children by medical officers of the Department. The services of the dietitian have also been made available to the patients attending the Centre.

### *Special Care Unit*

Thirteen children are accommodated in the Special Care Unit, under the supervision of a qualified Supervisor and a Nursery Assistant. These are children who could not successfully be trained in association with other children. Their ages range from 3 to 13 years. They are mostly doubly incontinent and have to be spoon-fed. Some of these children cannot walk when they are accepted for training, but with care, patience and encouragement, they learn to walk unaided. One boy suffers from the triple defects of subnormality, blindness and epilepsy.

The premises at present used for the Special Care Unit are unsuitable and space is limited. When the new Training Centre buildings are ready for occupation, it will be possible to extend the scheme considerably.

### *The Montessori Method of Education*

A Montessori Group has been established in the Junior Training Centre for 14 children whose chronological ages range from 8 to 11 years, but whose mental ages are between 3 and 5 years. These are problem children who have not responded satisfactorily to the usual methods and have therefore been unable to take their proper place in the planned timetable of an ordinary syllabus.

They include those who have shown personality problems of various types, for example, the hyperactive, the inhibited and the aggressive. Their behaviour has tended to disrupt the limited activities of the classes of backward children who are amenable to, and can profit by, regular training.

In adopting Montessori methods, in which there is so much freedom and activity, it is hoped to stimulate the interest, and set free the latent ability which under routine methods is obstructed by emotional barriers set up by a "difficult" child. In a state of fear, resentment and anger, the learning process is slowed down, or completely halted. It is essential to attempt some solution to these emotional tangles which result in "naughty" behaviour, and this attempt is based on the principles of freedom.

Under a regime where children are made to feel that they are free to choose the activity they like, free to continue or discontinue it, free to move around the room without constantly being ordered back to their chairs, the need to be "naughty" and restless is diminished. The necessity for threats and commands from the teacher is no longer present, her position being that of a grown-up friend and helper, not a "policewoman".

We hope that this new approach to children in the Training Centre will prove successful; our experimental group is at present limited to children who are probably mentally above average for a Training Centre, but whose individual difficulties in forming satisfactory human relationships may prevent their true development.

In a "free" environment, we confidently hope to find that the inhibited child will gain courage to step out for himself, that the restless child will find his own best pattern of work periods, and learn to increase his concentration through greater interest, and that the aggressive child will be more satisfactorily absorbed in his chosen activity, and will no longer need the constant assurance of superiority, which causes him to abuse his own powers. Results may not be obvious at once, but we feel that as a long term policy, the Montessori Method will bring its own reward.

#### *Psychologist's Report*

##### *(Mrs. A. E. Sedgley)*

This year's work has been carried on mainly in the following ways:—

- (i) Routine testing of children and adults in attendance at the Junior and Adult Training Centres.
- (ii) Testing of patients in their homes or in hospital.
- (iii) Group therapy with a selected number of children.
- (iv) Individual therapy.

##### *Routine Tests*

When children first arrive at the Centre, they have already had an intelligence test at some time during the preceding weeks, and therefore they are given several months in which to settle down before further testing is needed. There are, however, regular consultations with the Training Centre Supervisor when the suitability of various environments for the new child is discussed and when it is decided which group each child shall join.

When children reach the age of 16 years and are about to leave the Junior Training Centre, they are retested, and again after consultation, they are placed in the most suitable group in the Adult Centre.

In individual cases, tests are also given at the request of the Supervisor, members of staff, or the parents, when progress or deterioration is noticed, when behaviour difficulties occur, or before patients are sent to the Assessment Clinic.

##### *Domiciliary and Hospital Tests*

There are a relatively small number of older patients who have to undergo an intelligence test, when requests have been received for hospitalisation. These people have been interviewed in hospitals, clinics, or at home.

A number of cases of young people referred by general practitioners or psychiatrists on account of their poor adjustment to the community, have been visited in order to help assess their mental capacity and personality problems.

### *Group Therapy*

This is carried out with the idea of developing some degree of poise and self confidence in the children. Many of these children are unable to speak clearly or efficiently and such defects come within the province of speech therapy. But where the enunciation is reasonably clear, and where there is reason to hope that social efficiency might be improved, these children receive a special type of help in weekly sessions. In preparing for these sessions, various members of the staff are invited to become *dramatis personae* of short and simple playlets which are put on to the tape recorder. The themes are chosen with the idea of describing incidents within the scope and experience of children and adolescents. Typical of these are the titles "Christmas Shopping", "Guy Fawkes Day", and "A Day's Outing to the Sea". The characters in these short episodes find themselves in various predicaments and these provide talking points for discussion within the group. The aim is to encourage the children to listen together, to pick up indirectly some items of general knowledge, to attempt to formulate their own opinions and to find appropriate words in which to express themselves. Their efforts in this direction are played back to them and this gives rise to a mixture of embarrassment and delight among the listeners as each recognises his own voice or applauds the effort of another. Weekly notes are kept on each child in the hope of estimating the efficiency of this method.

### *Individual Therapy*

Quite frequently in the Centre, minor behaviour problems arise due to the innate character of mental handicap. The emotional and instinctive forces of adolescence are strongly present, without the mental powers of self-criticism and capacity for self-restraint. Emotional frustration appears often as anti-social behaviour. In the case of one little girl aged nine years, it is of practical importance that her aggressiveness should be reduced to avoid the necessity of exclusion from the Centre. At present she is liable to attack other children with serious scratching which occurs intermittently and without warning. When she arrives for a session of therapy she is allowed freedom to express her anti-social feelings in a way which is not possible in the classroom. At the same time she accepts coaching in reading which, if successful, may give her a permissible feeling of self-importance and achievement. This type of treatment is long-term and cannot bring quick results.

With the acquisition in recent months of a pleasant, newly decorated room for psychological work in the Centre, it is hoped that the therapeutic side may prove a real help to the staff in dealing with some of their difficult and interesting charges.

### *Speech Therapy Report*

(*Miss H. M. Streat*)

During the year there has been one change of Speech Therapist. Miss A. Johnson left in June and her place was taken by Miss M. J. Henshaw who began work in December. This meant that for some months a smaller number than usual was under treatment.

All the new entrants are assessed by the Speech Therapist during their first few weeks and those in need of treatment are either seen regularly or reviewed periodically.

Though one would like to report marked improvement in the speech of the children who have received treatment during the year, it must be remembered that progress is infinitely slower with these children than with normal children.

Their concentration span is limited, often to a few seconds, they are distracted by any and every external stimulus, and their ability to retain sounds and to associate them with words and objects is often negligible. However, they are always eager to come for treatment and enjoy thoroughly all that they do in the session.

Several low-grade children whom we had felt previously would not benefit at all from speech therapy have been taken again with encouraging results, and their teachers report that these children are now making much more effort towards verbalisation.

We are grateful for the good liaison with the psychologist and this has proved to be most helpful. The staff are always interested and anxious to cooperate and this has been an encouraging factor in any progress towards achieving satisfactory and adequate speech.

#### *Teacher of the Deaf*

The Teacher of the Deaf, Mrs. J. Stephens, continued to attend on a sessional basis until her resignation in July. Since that time it has been impossible to replace her owing to the national shortage of teachers of the deaf.

#### *Margaret Morris Movement*

Miss J. Turner reports a most satisfactory year's work. All groups have completed their schedule covering remedial and aesthetic training. It has been possible to give more time to percussive movement and the conscious use of direction and effort.

#### *Scouting and Guiding*

The 72nd Bristol (Marlborough House) Scouts and Cubs again completed a most successful year, the highlight of which was their first Scout Camp under canvas, held in the grounds of the Bristol Children's Help Society Camp at Winscombe. Three Scouters and 23 Scouts attended.

The 68th Bristol (Marlborough House) Girl Guide and Ranger Companies consist of 22 Rangers and 12 Girl Guides. During Guide Week the girls collected the sum of £4 14s. 3d. The Annual Church parade was held at St. James' Church in the Horsefair with the Rev. E. Hopkins inspecting the companies at the conclusion of the service.

The sum of £7 was gratefully received from 177th Bristol Girl Guides (Southville Methodist), this being the collection taken at their Christmas Carol Service. It is very encouraging to know that the normal Guides are in sympathy with their less fortunate sisters, and wish to help them.

The Rangers contributed four dozen eggs for distribution to elderly people living at Hengrove, and the sum of £4 4s. 0d. was given to Blackboy's Coal Fund—this being the profit made on the sale of Christmas Cards.

Visits of observation have been made during the year to the Red Lodge, Cabot Tower and the Museum.

#### *Sheltered Workshops*

In the Annual Report for 1959, concern was expressed over the difficulty which was being experienced in obtaining suitable contractual work from local manufacturers. As a result of intensive negotiations with manufacturers in the City there has, in 1960, been a reversal of previous circumstances. At the close of the year all men and women attending Marlborough House who were capable of carrying out the simple repetitive operations involved, and who were not engaged in other tasks, were fully occupied in the sheltered workshop section, and there is every indication that this state of affairs will continue.

A number of jobs have been carried out during the year. Those now in hand include the welding of polythene discs as part of a process for manufacturing car licence holders; finishing and stringing of carrier bags, and sorting of polythene, P.V.C. and paper offcuts for salvage purposes.

With the considerable increase in work available, a new and pressing problem has presented itself. Each contract undertaken entails considerable storage space and this is not available at Marlborough House, neither is there enough room in the workshops to carry out some processes, so that expansion of the project is not possible at present. The difficulties are aggravated by the unsuitable approaches to the Training Centre and the various levels on which the premises are situated. Properly planned workbays, loading bays and store rooms will be available at the new Training Centre, but this will not be ready for two years. In the meanwhile it may be necessary to ask for temporary accommodation to be made available for storage purposes.

Experience over the past four years has proved conclusively that sheltered workshops provide valuable training for both boys and girls, and there can be no doubt that an extension of the scheme is essential.

#### *Marlborough House Parent-Teacher Association*

The members of this Association have held numerous meetings and functions during the year. Of these some have been designed to provide entertainment or social activities, and others to raise funds from which to provide amenities for the patients attending Marlborough House. In addition, several talks on matters related to the problems of mental disorder have been arranged, and have proved instructive and interesting to both staff and parents.

The organisation does a great deal to encourage the cooperation of parents with staff, and to assist in the task of providing care and training at Marlborough House.

#### *Bristol and District Society for Mentally Handicapped Children*

1960 being World Mental Health Year, the Bristol and District Society for Mentally Handicapped Children have done all in their power to increase public awareness and understanding of the problems of the mentally handicapped, and thus try to remove some of the stigma and prejudice which still unfortunately exists. A number of events have been organised, the general theme throughout the year being "The Care and Acceptance of the Mentally Handicapped within the Community".

During the year the National Society for Mentally Handicapped Children organised a week's visit to Holland to study Dutch facilities and methods, and also held a three-day International Conference in London. The Bristol and District Society were pleased to sponsor Local Authority officers to attend both these events— Mr. F. Morton, Bristol Mental Health Officer going to Holland, and Mr. Pennington, Deputy Mental Health Officer attending the London Conference.

#### **The Increasing Problem of the Subnormal Family**

As pointed out in the Annual Report for 1959, the Mental Health Act does not specifically make provision for the supervision of subnormal and severely subnormal persons living in the community as did the *Mental Deficiency Act, 1913*. The advantages and disadvantages of Statutory Supervision were considered in last year's report.



SOCIAL AND DIVERSIONAL THERAPY CLUB AT SOUTHMEAD HEALTH CLINIC



CLUB FOR THE ELDERLY AT SOUTHMEAD HEALTH CLINIC



TOWNSEND YOUTH CLUB (MARLBOROUGH HOUSE)



SHELTERED WORKSHOP AT THE BRISTOL TRAINING CENTRE  
(MARLBOROUGH HOUSE)

Now that the new legislation has been fully implemented, it is appropriate to consider some of the problems which are arising now that Mental Welfare Officers can no longer impose help and advice upon mentally retarded persons unwilling to accept it—even when it is apparent that such guidance is necessary. Many higher grade subnormal persons are totally without insight into their limitations, and are so sure of their ability to cope with their own affairs, and resentful of any sort of control, that they refuse to accept any proffered help.

Difficulties encountered by subnormal families which are coming increasingly to the notice of the Mental Health section, fall mainly under two headings:—

#### *1. Finance*

Instability in employment frequently results in an uncertain and low average income. An inability to understand hire purchase agreements often leads to financial difficulties, and it is not unusual to find a family who have accepted so many commitments that their total expenditure exceeds their income. While it is appreciated that hire purchase can be of great help to certain sections of the community, and that the majority of firms doing business through the medium of extended payments are reputable in every way, unfortunately there are in existence some traders who take advantage of the limited intelligence and understanding of a subnormal family. The subject of hire purchase is being looked at critically by the staff of the Mental Health Section and will probably be the subject of a report in a subsequent year.

#### *2. Family Responsibilities*

There are an increasing number of subnormal persons married to each other in Bristol. This is in part due to early discharge from hospital, and also to the discontinuation of statutory supervision by the Mental Welfare Officer. There is no legal barrier to the marriage of mentally subnormal persons and although such a union is usually undesirable and steps are taken to discourage it, it is not easy to persuade a man or woman in this category to accept advice. They are usually unable to realise that they are unfit to cope with inevitable difficulties and are often incapable of foreseeing them.

Such young married couples tend to find themselves accommodation in furnished rooms which are squalid and depressing, and for which they pay a high rent. In a high percentage of cases the girl is pregnant at the time of marriage, in others a baby is born within the first year. The problem is then intensified by the responsibility of caring for a child in an unsuitable home environment. It quickly becomes apparent that they are incapable, under existing circumstances, of providing adequate care for their off-spring, and the Local Authority is faced with a decision as to whether to take steps to have the child placed in the care of the Children's Department, action which may well have to be repeated within a further period of twelve months. The alternative to removing the child from the parents would be to seek to improve the home environment, but it is often very difficult to support an application for the tenancy of a council house if the man and wife are of dull intelligence, lack housekeeping ability and are of known irresponsible attitude.

On occasions when an application is before the Court to secure the removal of a child from its parents, or when steps are being taken to keep the child in the long term care of the Children's Department, the Magistrate may express the view that because the parents have been without suitable accommodation, they have not had a reasonable opportunity of proving their ability to establish an independent family unit. For this reason the Medical Officer who is asked to express an opinion as to the mental ability of parents to care for their child, would have some difficulty in reaching a conclusion.

There may well be an advantage to be gained from making available to the Local Health Authority's Mental Health Section, some sub-standard accommodation in which mentally subnormal families can be housed and kept under the close supervision of the Mental Welfare Officer.

The following cases illustrate this problem:

*Case A*

This mentally subnormal man now aged 29 years has been under the supervision of the Mental Health Section since leaving a special day school for educationally subnormal children in 1948. He lived with his parents in a comparatively good home, and, as a result of his parents' influence and the support and advice given by the Mental Welfare Officer, he had a good employment and behaviour record until he married when 27 years of age.

His wife, now aged 31 years, is of very low intelligence but was never formally ascertained as subnormal. She attended an ordinary school until 14 years of age and then found employment in a local factory where she worked satisfactorily for fourteen years. She had an unstable home environment due to her mother's chronic mental illness, which resulted in frequent periods in hospital and eventual death by suicide when the girl was 11 years old. Her father, a man of aggressive personality, later remarried, but the stepmother found the girl difficult to control. She has a younger brother who is severely subnormal and who attends the Marlborough House Training Centre.

Against the advice given to them, the couple married in March 1959, and thereafter it became difficult to obtain any cooperation. Their first child was born in hospital two months after the marriage. The infant was in poor health and underweight and was admitted to a residential nursery where it has remained in the care of the Children's Officer.

The couple have moved on innumerable occasions from one set of furnished rooms to another; usually the accommodation has been in the basement of a squalid tenement house. Frequently they have returned to their respective families for shelter when they have been homeless. Their name is on the waiting list for a Corporation house but it is generally recognised that they would be unsatisfactory tenants.

Since marriage the man has developed such a poor work record that the Ministry of Labour are considering suspending his benefit on the evidence of his having left five jobs since October 1960 without reasonable cause. The couple have lived most of their married life on state insurance benefits supplemented by National Assistance Allowance.

They have shown themselves to be completely irresponsible and socially unacceptable. They have persistently failed to pay their debts, have fallen into substantial arrears of rent, have been quite unable to use the considerable help offered by various social agencies, and have exhausted the patience of their own families. They seem incapable of appreciating the seriousness of their situation, resorting to lying and childish behaviour to save them from the consequences of their social incompetence.

They have made repeated efforts to secure the return of their child to their care, and have increased their hire purchase commitments by acquiring bedding and nursery equipment. Their fear of being judged incapable of providing the minimum material standard needed to allow them to have their child with them, and their fear of permanent separation from each other, seems to drive them on to even more irresponsible behaviour.

They are now under notice to quit their present undesirable accommodation, and a second child is expected in May 1961.

**Case B**

This man was excluded from Special School at the age of 13 years. He had been found to have an I.Q. of 47 and to be incapable of benefiting from education. He was referred to the Mental Health Section, and was placed under statutory supervision in June 1942. He attended the Local Health Authority Training Centre until August 1947, when he obtained work as a labourer. Regular visits were made to his home by the Mental Welfare Officer between 1942 and 1956, and all reports indicated that despite the fact that he often changed his job, he was making satisfactory progress.

In June 1956 it was reported that he had formed an association with a girl from a well known local problem family. The Mental Welfare Officer repeatedly tried to persuade the man not to marry the girl, but his advice was rewarded with abuse. The marriage took place in January 1958, and on the 8th May, 1958 a child was born, though the man's parents entertained doubts about the paternity. The couple went to live at the girl's home and it became difficult to maintain contact with him. Two years later the entire family were evicted for non-payment of rent. The man then returned to his parents while the girl entered Part III accommodation provided by Welfare Services Department, and the child was placed temporarily in the care of the Children's Officer.

From the date of marriage the man had an increasingly erratic work record and several periods of unemployment. He appeared before the Magistrates on two occasions and was found guilty of stealing from workmates. After the eviction it was found that the couple had incurred several hire purchase commitments—the man did not know the whereabouts of the articles in question, and the woman said they had been returned to the shop, but the firm concerned denied this—consequently the man appeared before the County Court and was ordered to pay an amount of £3 per week to clear the debt. It appeared to the officers concerned in the case that the furniture had been sold by the wife and some member of her family.

A second child was born subsequently and consideration was given to providing accommodation in which to set up the family as a unit, but it was appreciated that a considerable amount of marital discord existed. At this stage the woman applied for a Separation Order and this was granted.

It has since been reported that the woman is again pregnant and the man denies responsibility for this. Since the separation the man's mother has died and he has remained in the care of his father. He has accepted the help of the Mental Welfare Officer and is cooperating well. He is in settled employment, is paying off his hire purchase debts, and is contributing regularly to the maintenance of his wife and the children who are now subject to a "Fit Person Order". There is every hope that he is now well settled.

### **Mental Illness**

During 1960 the number of cases dealt with by Mental Welfare Officers was 490.

Full statistical details of mental illness are given at the end of this report.

An accompanying map shows the geographical distribution of Bristol cases dealt with during the five years ending 31st December, 1960. It is interesting to compare this with the map showing the distribution of subnormality and severe subnormality also published in this report.

## Social Therapy and Rehabilitation

### *Industrial Therapy Organisation*

(Dr. D. F. Early, Physician Superintendent, Glenside Hospital)

Industrial Therapy Organisation (Bristol), Ltd., is a non-profit making company, limited by guarantee, which was formed early in 1960, by a group of doctors, industrialists, trade unionists, church and civic leaders who now constitute the Board of Directors.

It sprang from the industrial therapy unit in Glenside Hospital (formerly Bristol Mental Hospital, Fishponds) where since early 1958 long term patients have been doing contracts for outside firms. By the end of 1959 nearly 400 were working in the unit. The effect of this on their health and outlook was so favourable that it was decided to carry the venture a stage further by providing work outside the hospital in factory conditions, through which patients could return to the community completely fit for work in industry and commerce.

Many firms and organisations gave money or services to equip the old church school building in York Street, St. Philip's Marsh, and on March 7th, 1960, the factory opened with 24 worker patients. Now there are about 100 helped by qualified nursing staff, I.T.O.'s own staff assisted by industrial supervisors from local firms, and social workers from the Local Health Authority.

A considerable number of worker patients have already been successfully rehabilitated and are doing well in industry and commerce.

### *Mental Health Social Centres*

The Social and Diversional Therapy Club established in 1953 at the Southmead Clinic has continued to provide benefit to inhibited and introvert patients, most of whom have been successfully treated for mental disorder but have been left with a residual anti-social or a-social problem. During the year a number of patients have been rehabilitated and have found it possible to return to a normal mode of life. A consultant psychiatrist from Barrow Hospital has maintained the discussion groups and play-reading sessions in the club each week. Outings to local factories and to theatres and seaside resorts have been arranged as part of the social activities of the club.

Close liaison has been established with the Industrial Therapy Organisation and four patients have been accepted for training and employment in that unit. There is now developing a flow of patients from the hospital to the Social Therapy Club and on to the Industrial Therapy Organisation.

At the end of the year 33 patients were in regular attendance.

### *Club for Elderly Mentally Disordered Persons*

In association with the Diversional and Social Therapy Club at Southmead, a club has been opened for elderly mentally disordered patients as an experimental unit. This club occupies one small room in the clinic premises and is held each week-day afternoon. Space does not permit the expansion of the group which now provides facilities for six elderly patients at each session. There are 7 persons on the register.

Voluntary helpers provided by the British Red Cross Society have made it possible to operate this club without employing additional staff. All patients have to be transported to and from the club and this service is rendered by the Ambulance Service and Hospital Car Service.

In the short time that this club has been in operation, it has been found to be a highly successful venture. It provides elderly confused patients with some occupation and they no longer have to sit about at home each day with nothing

to do. It also provides a necessary period of rest and relaxation for their relatives. It has been found that after attending the club patients have been more settled and less inclined to wander the house at night. In many instances the need for admission to hospital has been delayed or obviated. There is, however, a pressing need for new accommodation for this unit in order that the facilities can be extended.

### *Townsend Youth Club*

In May of this year a club for mentally handicapped persons over the age of 16 years was established at Marlborough House. The club opens on three nights each week from 7 to 9 p.m. A grant from the Youth Services Committee enabled the appointment of two part-time youth leaders. The bulk of the club membership is drawn from those attending the Training Centre at Marlborough House, although quite a number come in to the club from the hostels administered by the local hospital management committees, and to a lesser degree from boys and girls under informal supervision living and working in the community.

The club is run on almost identical lines to other Youth Clubs in the City which cater for normal young people and activities include knitting and sewing, leatherwork, beauty therapy and movement classes, physical training, and painting classes; it is hoped in the near future to start a reading class. Table tennis and television are also available to club members.

There is, at present, a membership of over 90.

### *Suicide, 1960*

#### *Age Incidence*

	<i>Suicide</i>			<i>Attempted</i>		
	<i>M.</i>	<i>F.</i>	<i>Total</i>	<i>M.</i>	<i>F.</i>	<i>Total</i>
Under 20 ..	..	..	—	2	1	3
20-29 ..	..	..	1	—	—	—
30-39 ..	..	..	1	2	3	5
40-49 ..	..	..	5	4	9	7
50-59 ..	..	..	6	5	11	7
60-69 ..	..	..	8	5	13	4
70-79 ..	..	..	2	—	2	6
80+ ..	..	..	1	—	—	—
<b>Totals</b> ..	..	..	<b>24</b>	<b>16</b>	<b>40</b>	<b>22</b>

#### *Method*

	<i>Suicide</i>			<i>Attempted</i>		
	<i>M.</i>	<i>F.</i>	<i>Total</i>	<i>M.</i>	<i>F.</i>	<i>Total</i>
Poisoning ..	..	..	—	..	..	—
Coal Gas ..	..	..	14	8	22	2
Aspirin ..	..	..	1	1	2	1
Narcotic ..	..	..	—	2	2	—
Tablets ..	..	..	1	3	4	6
Chloroform ..	..	..	—	—	—	1
Drowning ..	..	..	1	1	2	1
Cutting throat ..	..	..	1	—	1	2
Cutting wrist ..	..	..	—	—	—	1
Stabbing ..	..	..	—	—	2	—
Hanging ..	..	..	1	1	2	—
Choking ..	..	..	—	—	—	1
Jumping from ship ..	..	..	1	—	1	—
,, window ..	..	..	2	—	2	—
,, gorge ..	..	..	1	—	1	—
,, roof of store ..	..	..	—	—	—	1
Crashing car ..	..	..	—	—	—	1
Strangulation ..	..	..	1	—	1	—
Starvation ..	..	..	—	—	—	1

*Total number of Persons known to Mental Health Services at 31st December, 1960*

*In the Community*

	<i>M.</i>	<i>F.</i>	<i>Total</i>
Under Supervision on 31st October 1960 .. ..	514	412	926
Added to Supervision list during November/December 1960 .. ..	3	6	9
Discharged or Died during November/December 1960 .. ..	2	5	7
<i>Remaining under Supervision (Informal) at 31st December 1960</i> .. .. ..	515	413	928
Receiving After-Care on 31st October 1960 .. ..	103	121	224
Added to After-Care list during November/December 1960 .. ..	—	—	—
Discharged or Died during November/December 1960 .. .. ..	8	11	19
<i>Receiving After-Care on 31st December 1960</i> .. ..	95	110	205
Under Guardianship on 31st October 1960 .. ..	6	3	9
Placed under Guardianship during November/December 1960 .. ..	—	—	—
Discharged or Died during November/December 1960 .. ..	—	—	—
<i>Remaining under Guardianship at 31st December 1960</i> .. ..	6	3	9
<i>Total in Community at 31st December, 1960</i>			
Under Supervision .. .. .. .. ..	515	413	928
Under Guardianship .. .. .. .. ..	6	3	9
Receiving After-Care .. .. .. .. ..	95	110	205
<b>Totals</b> .. .. .. .. ..	<b>616</b>	<b>526</b>	<b>1,142</b>

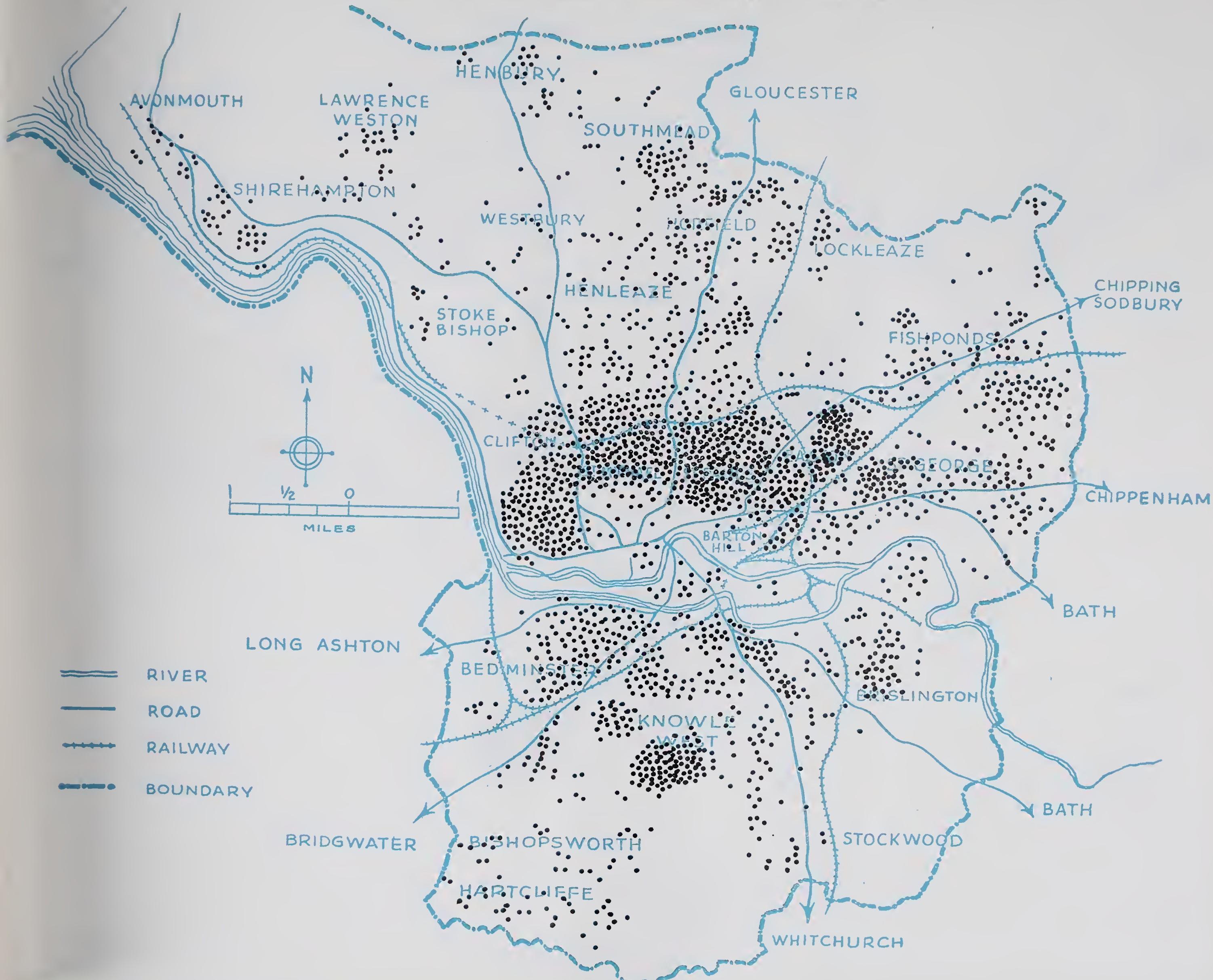
*In Hospital*

	<i>M.</i>	<i>F.</i>	<i>Total</i>
In Hospital on 31st October 1960			
Detained .. .. .. .. ..	271	192	463
Informal .. .. .. .. ..	684	937	1,621
Admitted during November/December 1960			
Detained .. .. .. .. ..	18	23	41
Informal .. .. .. .. ..	78	151	229
Discharged or Died during November/December 1960			
Detained .. .. .. .. ..	10	10	20
Informal .. .. .. .. ..	90	169	259
<i>Remaining in hospital on 31st December 1960</i>			
Detained .. .. .. .. ..	279	205	484
Informal .. .. .. .. ..	672	919	1,591
Regraded from Informal to Detained .. .. ..	3	—	3
Regraded from Detained to Informal .. .. ..	34	30	64
<i>Remaining (after Regrading) on 31st December 1960</i>			
Detained .. .. .. .. ..	248	175	423
Informal .. .. .. .. ..	703	949	1,652

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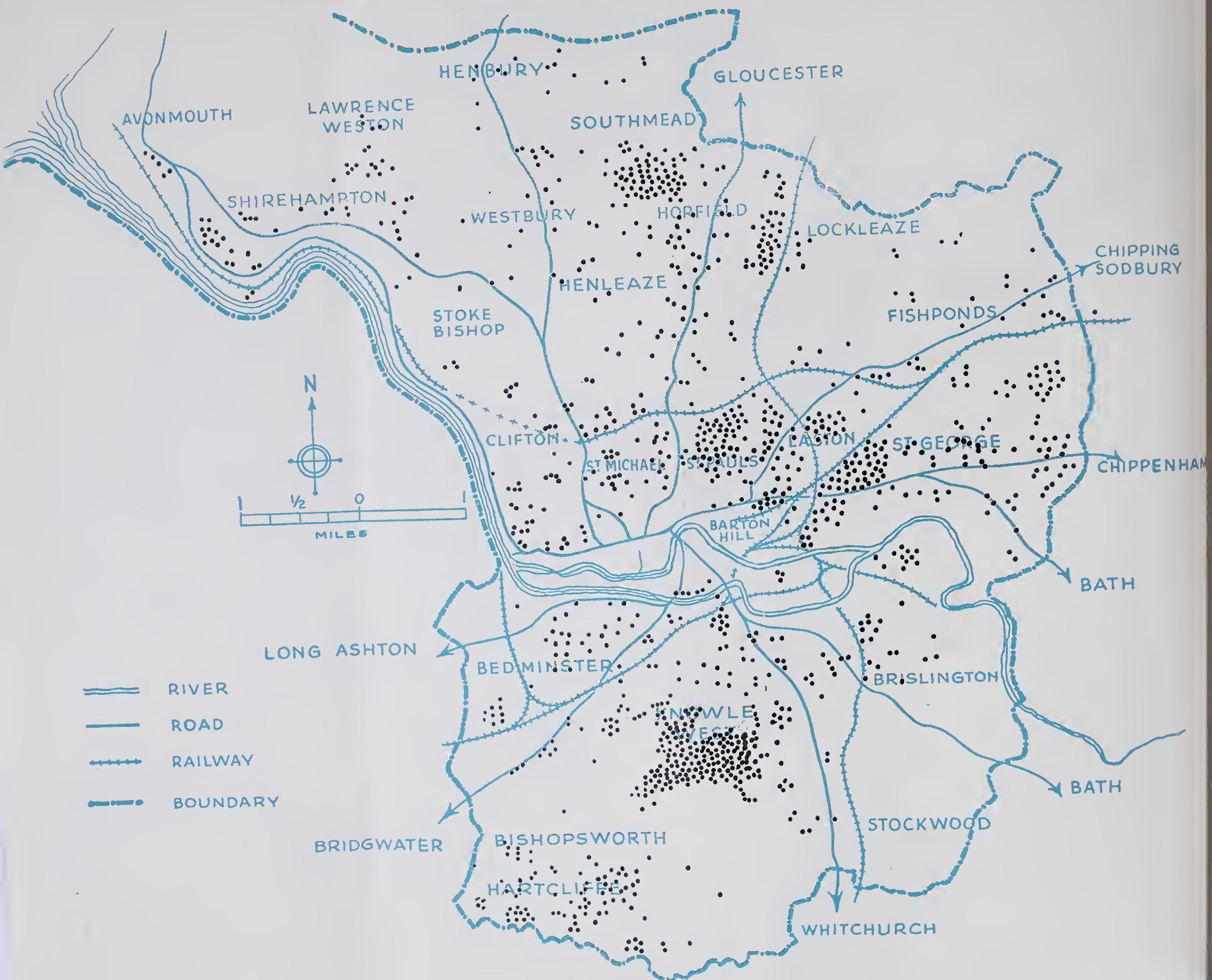
# MENTAL ILLNESS

Distribution of Cases dealt with during the five years ending 31st October, 1960



# MENTAL DEFICIENCY

Distribution of Mental Defectives known to the Local Health Authority at 31st October, 1960



### Statistical Tables

**(i) Total Mental Defectives known to Local Health Authority at 31st October, 1960**

				M.	F.	Total
<i>(a) Under Mental Deficiency Acts:</i>						
In Mental Deficiency Hospitals (including licence)						
Detained .. .. .. ..	207	164	371			
Informal .. .. .. ..	178	167	345			
Under Guardianship .. .. .. ..	6	3	9			
Under Supervision .. .. .. ..	514	412	926			
Totals .. .. .. ..	905	746	1,651			
<i>(b) Not under Mental Deficiency Acts:</i>						
Pending .. .. .. ..	8	4	12			
Discharged from Order (After-care) .. .. .. ..	57	80	137			
Totals .. .. .. ..	65	84	149			
All known cases .. .. .. ..	970	830	1,800			

**(ii) Cases Referred as Mentally Defective up to 31st October 1960**

				M.	F.	Total
<i>(a) Referred by</i>						
Local Education Authority .. .. .. ..	35	19	54			
General Medical Practitioners .. .. .. ..	2	3	5			
Courts or Police .. .. .. ..	1	—	1			
Others .. .. .. ..	12	9	21			
Totals .. .. .. ..	50	31	81			
<i>(b) Disposal:</i>						
Admitted to Mental Deficiency Hospitals .. .. .. ..	4	—	4			
Admitted to Mental Deficiency Hospitals (informally) .. .. .. ..	2	6	8			
Placed under Supervision .. .. .. ..	31	21	52			
Action not yet taken:						
School Leavers .. .. .. ..	4	—	4			
Others .. .. .. ..	4	4	8			
Action unnecessary:						
Left District .. .. .. ..	2	—	2			
Died .. .. .. ..	1	—	1			
“Friendly” Supervision .. .. .. ..	2	—	2			
	50	31	81			

## (iii) Analysis of Mental Defectives in Hospital (including those on Licence)

				M.	F.	Total
At 31st December, 1959	..	..	..	375	328	703

*Admitted during 1960 (up to 31st October 1960)*

From Supervision	..	..	..	21	14	35
Others	..	..	..	7	7	14
				28	21	49

*Methods of admission:*

Section 3 M.D. Act	..	..	..	1	4	5
Section 6     "	..	..	..	2	3	5
Section 8     "	..	..	..	3	—	3
Informal admissions	..	..	..	22	14	36
Totals	..	..	..	28	21	49

*Discharges during 1960 (up to 31st October 1960)*

By order of Board of Control	..	..	71	94	165
By operation of law	..	..	7	1	8
Discharged from Informal care	..	..	9	4	13
Died	..	..	1	5	6
Totals	..	..	88	104	192
Discharged from Order but remaining in hospital informally	..	..	70	86	156
Remaining in hospital at 31st October 1960	..	..	385	331	716

## (iv) Analysis of Mental Defectives under Guardianship

				M.	F.	Total
At 31st December, 1959	..	..	..	7	3	10
Admitted during 1960 (up to 31st October 1960)	..	..	..	—	—	—
Discharged up to 31st October 1960	..	..	..	1	—	1
Remaining under Guardianship at 31st October 1960	..	..	..	6	3	9

## (v) Analysis of Mental Defectives under Supervision

		<i>M.</i>	<i>F.</i>	<i>Total</i>
At 31st December 1959	.. .. ..	504	404	908
Added during 1960 (up to 31st October 1960)	.. ..	65	45	110
Removed during 1960 (up to 31st October 1960):				
Discharged from Supervision	.. ..	19	15	34
Admitted to M.D. Hospital	.. ..	21	14	35
Left District	.. .. ..	12	7	19
Died	.. .. ..	3	1	4
Totals	.. .. ..	55	37	92
Remaining under Supervision at 31st October 1960	.. .. ..	514	412	926

## (vi) Bristol Patients in Mental Hospitals at 31st October 1960

		<i>M.</i>	<i>F.</i>	<i>Total</i>
Detained	.. .. ..	64	28	92
Under Informal care	.. .. ..	506	770	1,276
Totals	.. .. ..	570	798	1,368

## (vii) Persons Receiving Psychiatric After-Care from Local Health Authority at 31st October, 1960

		<i>M.</i>	<i>F.</i>	<i>Total</i>
Ex-Service	.. .. ..	6	—	6
Ex-Mental Hospitals	.. .. ..	32	25	57
Others	.. .. ..	8	16	24
		46	41	87

(viii) Mental Illness—Cases dealt with by Mental Welfare Officers during period up to 31st October, 1960

	All Ages												Total											
	Under 20			20-29			30-39			40-49			50-59			60-69			70-79			80 and over		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
A. Removed to Observation Ward under Section 20, Lunacy Act 1890:—																								
Transferred to Bristol mental hospitals as certified patients	..	..	1	4	—	12	5	16	2	10	1	8	—	4	—	1	9	55	55	64	—	—	—	—
Transferred to other mental hospitals as certified patients	..	..	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	2	2	2	2
Transferred to Bristol mental hospitals as voluntary patients	..	..	—	1	2	1	4	2	4	1	4	1	1	—	—	—	—	—	—	—	6	15	21	21
Transferred to other mental hospitals as voluntary patients	..	..	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1
Transferred to Bristol mental hospitals as temporary patients	..	..	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Transferred to Bristol mental hospitals as informal patients	..	..	2	1	3	5	6	3	5	10	4	13	4	10	3	7	1	—	—	28	49	77	77	
Discharged home	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Transferred to sick wards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Died	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number of Section 20 cases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B. NOT dealt with under Section 20 of Lunacy Act, 1890:—																								
Certified direct admissions to mental hospitals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Voluntary direct admissions to mental hospitals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Temporary direct admissions to hospitals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Informal direct admissions to mental hospitals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Urgency Orders (subsequently certified)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Provided with care other than under Lunacy and Mental Treatment Acts	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number of cases not under Section 20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total cases dealt with (A. and B.)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	3	4	9	10	16	13	19	18	21	13	14	22	10	18	12	17	104	115	219	—	—	—	—	—
	8	5	17	25	26	38	37	55	34	44	30	46	25	44	27	29	204	286	490	—	—	—	—	—

## PREVENTION OF ILLNESS, CARE & AFTER CARE TUBERCULOSIS

Dr. P. W. Bothwell  
(*Senior Medical Officer, Epidemiology*)

There were further reductions in the fatal and notified new cases of tuberculosis in 1960, as the following table shows:—

<i>T.B. Notifications</i>	1958	1959	1960
Primary Pulmonary	271	219	198
Primary Non-pulmonary	36	47	27
<i>Transfers in and other sources of information:</i>			
Pulmonary	90	60	72
Non-pulmonary	11	8	2
	408	334	299
	—	—	—
<i>T.B. Deaths</i>			
Pulmonary	37	27	25
Non-pulmonary	10	5	3
	47	32	28
	—	—	—

The number of persons on the T.B. Register at 31st December was 4,116, compared with 4,164 at the end of 1959.

Of the new notifications in 1960, 22 were sputum positive. Of all the cases on the register, 83 were sputum positive. The trend for new cases to come from the older age group males continued in 1960. Two new cases came from the hostels in Bristol. The routine examination of contacts of cases at places of work was made in 28 cases but no new cases of T.B. were found in this way. There were no new cases of tuberculosis in teaching staff necessitating special investigation during the year.

### **The Care and After-Care of Patients and their Families**

The scope of arrangements for the care and after care of patients and their families has widened to include those discharged from general hospitals. A Head Almoner was appointed in May to develop and co-ordinate case work services, in association with other officers in the Department administering services already well established to meet responsibilities in the same, and the wider field of social and preventive medicine, and in co-operation with Almoners in the hospitals. After a preliminary survey, which included discussion with these officers and with the Head Almoners responsible for the medical social care of people in hospital and attending as outpatients, a scheme was evolved to meet the needs of patients in the age group sixteen to sixty and this was put into operation at the beginning of July. Because of the importance of providing a comprehensive and integrated service for this group the work is undertaken in close co-operation with general practitioners and the Nursing Services and health visitors are undertaking the long term follow up of these patients when casework has concluded, as a safeguard against further breakdown.

Since the introduction of the extended service the majority of referrals have been from Almoners in the local hospitals and the individuals concerned have been experiencing quite complex difficulties often arising out of long term illness or disability or terminal illness. A picture is gradually emerging of the hazards which these patients and their relatives may encounter in endeavouring to come to terms with serious and protracted illness and disability. In some cases the inability to adjust or adapt successfully has led to marital or family

disharmony while in others financial strain has become acute because of the gradual loss of ability to manage a small income effectively, and this is particularly true of those families where one member is suffering from an incurable disease which has such an emotional and physical impact on the rest. Another large group is the one where recovery from disability is immensely slow and for which the normal rehabilitation services are rarely used because of this fact and, finally, the smaller number who find adjustment almost impossible to achieve because of temperamental difficulties. It has been possible to give constructive help to a large proportion of these patients by casework, in partnership with nursing and social services offered by this Department. A close liaison is being established with officers of other Corporation Departments dealing with different aspects of social care and also with voluntary associations and statutory bodies with similar aims.

The general pattern of the work for patients suffering from tuberculosis and their families remains the same and the co-operation and assistance of other Corporation departments together with the National Assistance Board and voluntary societies has resulted in the maximum help for these people.

It should be noted that the notifications for 1960 were 225 and this only shows a decrease of 41 on the previous year. It is perhaps significant that only sixteen patients required the Disablement Resettlement Service of the Ministry of Labour. With the introduction of new drugs the period of illness is much shorter and where previously it was only possible to deal with the most pressing problems with which our patients were confronted, during the past year it has been possible to do much needed casework.

The special Remploy Factory at Southmead continues to provide sheltered employment for our patients. During the past year, however, after consultation with the Medical Officer of Health the Disablement Resettlement Officers and the Care Committee, it was decided to allocate 25 per cent of the vacancies to disabled people other than those suffering from tuberculosis providing a vacancy was not required for such a person.

Patients have continued to benefit from the Council's scheme for the provision of free milk and this was granted to an average of 284 per day on medical recommendation and subject to an income limit.

Housing conditions in 62 families were such that support was given to applications for re-housing and 47 families were re-housed.

The Tuberculosis Voluntary Care Committee continues to operate Kiosks at Southmead Hospital, Frenchay Hospital, Ham Green Hospital and Winsley Chest Hospital and nine ex-patients are now employed at these Kiosks. Towards the end of last year, owing to the return of Snowdon Road Hospital to the control of the Local Authority and the consequent change in its character, the Kiosk was no longer required and the Care Committee have now closed it. Fortunately, it is now comparatively easy to find employment for ex-patients and already a number of the staff, who had worked in the Kiosk for some six years, have found better employment.

Increasingly the essential needs of the family are being met by the National Assistance Board and, therefore, the Care Committee funds have been released to help with such things as the payment of insurance premiums, entrance fees for examinations and also giving holidays to the patient and his family.

The Care Committee continued to provide occupational therapy for patients in the form of classes and the occupational therapist visits the homes of those patients unfit to attend.

The following table shows the numbers of BCG vaccinations and positive skin tests in various groups, together with results of follow-up of positive reactors.

### B.C.G. Vaccination Skin Test and X-ray Results

Group	13 year olds			14 year olds and over			"Further Education" Group		
	M	F	Total	M	F	Total	M	F	Total
No. Negative	3,521				1,484				105
No. Vaccinated	3,521				1,484				105
No. Positive (All size reactions)	225			182	5.73%	4.63%	104		
							106	6.14% 6.26%	14
								6.9	7.45% 36.70%
No. Positive (Over 15 m.m.)	14			6	0.36%	0.15%	12		
							10	0.71% 0.59%	4
								25	2.13% 13.30%
X-ray results of 15 m.m. and over	10 N.A.D.			5 N.A.D.			12 N.A.D.		
	3 ? x-rays			1 ? x-ray			7 N.A.D.		
	No act.			No act.			2 ? x-rays		
							No act.		
							No act.		No act.
X-ray results of under 15 m.m.	191 N.A.D.			147 N.A.D.			87 N.A.D.		
	11 ? x-rays			15 ? x-rays			3 ? x-rays		
	No act.			No act.			No act.		
							No act.		No act.
								8 N.A.D.	37 N.A.D.
								3 ? x-rays	
								No act.	
								No act.	

The mass radiography service examined 35,188 Bristol residents in 1960 and revealed 66 cases (one-third of new cases) of active tuberculosis 25 requiring observation, 156 inactive cases, and 680 non-tuberculous conditions; 41 still have to be classified.

### **Analysis of Cases of Patients treated in General Hospitals**

<i>No. of Cases</i>	<i>Source</i>	<i>No. of Cases</i>	<i>Disease or Disability</i>
36		36	
1	Bath United Hospital	2	Chronic bronchitis
3	Bath Rheumatic Diseases Hospital	10	Carcinoma
12	Bristol United Hospitals	1	Cerebral lesion
1	Cossham Hospital	1	Crohn's disease
4	Frenchay Hospital	1	Diabetes
1	Ham Green Hospital	3	Disseminated sclerosis
1	Southmead Hospital	3	Emotional disturbance
3	District Nurses	2	Heart disease
3	General Practitioners	1	Hemiplegia
2	Health Visitors	1	Malignant hypertension
1	Ministry of Labour	1	Mastoid
3	Patients	1	Muscular dystrophy
1	T.B. Welfare Officer	2	Parkinson's disease
		1	Pulmonary infarct
		5	Rheumatoid arthritis
		1	Tuberculous kidney

<i>No. of Cases</i>	<i>Reason for referral</i>	<i>No. of Cases</i>	<i>Result</i>
36		36	
1	Care of family	15	Need met
13	Difficulties of adjustment emotional or environmental	16	Need partially met
2	Family disharmony	5	Need not met
12	Financial difficulties		
3	Marital difficulties		
1	Rehousing		
4	Rehabilitation		

### *B.C.G. Vaccination for T.B. Contacts*

No. Skin Tested	987
No. Positive	113
No. Negative	877
No. Vaccinated	1,066

## VENEREAL DISEASES

A. E. Tinkler, M.A., M.D., D.P.H.  
(*Consultant V.D. Officer*)

The number of new cases attending the Bristol V.D. Clinics continues to rise.

**Table 1 New Cases—All Conditions—Seen at the Bristol V.D. Clinics 1956–1960**

			<i>All Cases</i>	<i>Bristol Residents</i>
1956	..	..	1,802	1,269
1957	..	..	1,880	1,325
1958	..	..	2,027	1,502
1959	..	..	2,280	1,664
1960	..	..	2,766	2,070

### *Syphilis*

Although the incidence of syphilis remains very low there was a slight increase in early syphilis in England and Wales in 1959 and 1960. Of the 33 cases of early syphilis seen in the Bristol clinics, 19 occurred among seamen (17 foreign and 2 British), who attended the Avonmouth clinic.

The number of cases of early syphilis occurring in Bristol residents is so small that no conclusion can be drawn from the increase in 1960.

**Table 2 Number of New Cases of Syphilis seen at the Bristol V.D. Clinics 1956–1960**

	<i>Early Syphilis</i>	<i>All Cases</i>			<i>Bristol Residents Only</i>		
		<i>Late Syphilis</i>	<i>Total</i>	<i>Early Syphilis</i>	<i>Late Syphilis</i>	<i>Total</i>	
1956	..	27	55	82	13	34	47
1957	..	26	68	94	14	38	52
1958	..	19	25	44	9	19	28
1959	..	26	7	33	10	6	16
1960	..	33	17	50	13	12	25

For the second year in succession no new Bristol cases of congenital syphilis were seen at the clinics. This is the most encouraging aspect of the venereal disease situation in the City and is a tribute to the excellent co-operation which exists between the ante natal and venereal disease services.

### *Gonorrhoea*

The number of new cases of gonorrhoea continues to rise, but fortunately not so steeply as in 1959 when the incidence more than doubled over the previous year.

**Table 3 Incidence of Gonorrhoea 1956–1960**

		<i>England and Wales</i>	<i>Bristol Clinics</i>	
			<i>All Cases</i>	<i>Bristol Residents Only</i>
1956	..	20,310	249	151
1957	..	24,352	257	152
1958	..	27,915	249	233
1959	..	31,320	604	433
1960	..	33,640	675	482

The proportion of immigrants among the male patients with gonorrhoea attending the Maudlin Street Clinic remains very high.

**Table 4 Gonorrhoea—Male only—Maudlin Street Clinic**

	<i>Percentage of West Indians—</i>					
	<i>All Cases</i>			<i>Bristol Residents Only</i>		
	<i>Total Cases</i>	<i>West Indians</i>	<i>% West Indians</i>	<i>Total Cases</i>	<i>West Indians</i>	<i>% West Indians</i>
1958 .. 190	33	17%	143	33	23%	
1959 .. 336	131	39%	280	131	47%	
1960 .. 353	153	40%	321	153	47%	

The following report has been submitted by Miss Gwyneth Stinchcombe, the Medico-Social Worker:—

During the past few months wide publicity has been given to the problem of promiscuity amongst young people, with particular emphasis to the teenagers. In order that the problem as it affects the V.D. Clinics might be viewed in perspective the following tables may be of some assistance in assessing the extent of "known" promiscuity of female patients between the ages of 12 and 25.

Table 5 gives the number of female patients seen at Maudlin Street and Southmead Clinics in 1960 according to age group and diagnosis.

**Table 5**

<i>Age</i>	<i>No. of Patients</i>	<i>Diagnosis</i>			<i>Total</i>
		<i>Gonorrhoea</i>	<i>Syphilis</i>	<i>Non-venereal</i>	
12-15	56	3	—	53	56
16-19	188	45	3	140	188
20-25	189	65	3	121	189
	433	113	6	314	433
		—	—	—	—

Table 6 shows the agency through which these patients were referred to the Clinics.

**Table 6**

<i>Age</i>	<i>Self</i>	<i>Remand Home</i>	<i>A.N.C./&amp; Hospitals</i>	<i>Social Worker</i>	<i>Own Dr.</i>	<i>Other Agencies</i>	<i>Total</i>
12-15	1	34	18	—	—	3	56
16-19	24	24	85	38	15	2	188
20-25	28	—	87	50	16	8	189
	53	58	190	88	31	13	433
	—	—	—	—	—	—	—

The number of unmarried mothers included in these figures is 180 representing 30 per cent of the total, 17 in the 12-15 age group, 83 in the 16-19 group and 80 in the 20-25 age group, but two factors should also be borne in mind—(a) that all the 433 patients seen had run the risk of infection, and (b) that these figures represent only the patients who actually attended either Maudlin Street or Southmead Clinics and are therefore only symptomatic of a trend which it is impossible to assess statistically.

### *Contact Tracing*

It is gratifying to note that the number of male contacts successfully traced and examined shows 100 per cent increase over 1959, indicating a marked improvement in the patient's response to routine interrogation. The number of female contacts remain steady and demonstrates the vital importance of being quick off the mark in an effort to keep the incidence of V.D. as low as possible. The tracing of females named as contacts of male patients with gonorrhoea has been most successful, 80 per cent of the female patients treated for gonorrhoea at Maudlin Street Clinic were brought in by the Social Worker.

### *Default Control*

Some improvement is noticeable this year and is a valuable means of keeping in touch with the patients until, both medically and socially, they are ready to be discharged from the clinic, although there seems to be an increasing number of refusals to attend for routine surveillance due, possibly, to the efficacy of modern treatment.

Owing to reorganisation and structural alterations at Ham Green Hospital the number of in-patients visited has been negligible, but now the alterations are completed, the usual rehabilitation efforts will be resumed.



## THE AMBULANCE SERVICE

The following report has been submitted by Mr. R. F. Wood, Chief Ambulance Officer:—

### Statistics

**Table I**

*Ambulance Service Vehicles only*

	1952	1953	1954	1955	1956	1957	1958	1959	1960
Patients	114,554	143,590	147,990	148,720	152,386	150,341	148,884	149,168	156,599
Mileage	731,969	813,353	804,662	792,847	792,405	771,670	755,048	741,794	762,466
M. Per Pat:	6.39	5.66	5.44	5.33	5.20	5.13	5.07	4.97	4.87

This table indicates the number of patients carried in Ambulance Service vehicles since 1952 together with the mileage run and average miles per patient figure for the same period.

It will be noticed that despite the large variation between the number of patients carried in 1952 as opposed to those carried in 1960 the miles per patient figure has progressively decreased from 6.39 in 1952 to 4.87 in 1960.

**Table 2**

*Total number of Patients carried 1958–1960*

Month	Number of Patients		Increase or decrease over 1958	Number of patients	Increase or decrease over 1959
	1958	1959			
January	12,991	13,115	+124	13,308	+193
February	12,188	12,003	-185	13,013	+1,010
March	12,530	12,379	-151	13,801	+1,422
April	12,041	12,670	+629	11,770	-900
May	13,617	12,440	-1,177	13,606	+1,166
June	12,491	13,002	+511	13,102	+100
July	12,861	12,848	-13	13,135	+287
August	10,783	11,118	+335	12,107	+989
September	12,159	12,356	+197	13,557	+1,201
October	13,525	13,420	-105	14,109	+689
November	12,846	12,967	+121	14,834	+1,867
December	12,544	12,305	-239	12,809	+504
Totals	<u>150,576</u>	<u>150,623</u>	<u>+47</u>	<u>159,151</u>	<u>+8,528</u>

This table indicates the comparative figures over the past three years of the total number of patients carried in Ambulance Service vehicles plus those conveyed by the supplementary services, i.e. the Hospital Car Service and the Taxi Association.

It indicates quite clearly the increase in 1960, culminating in a total increase for the year compared with 1959, of 8,528 patients.

### *Personnel*

Sickness and the untimely death of Station Officer Ashley created a difficult situation as far as control of the Service was concerned for a considerable period during the year. The proposed introduction of a 42 hour working week for all driver/attendants as from January 1st, 1961 plus the extra 3 day annual

leave period to which personnel who have completed 10 years service are entitled, made it necessary to seek the approval of the Health Committee for an increase in the Establishment of six Driver/Attendants.

#### *Stations*

A general sense of frustration was felt by everyone in the Service that no positive date could be given in the foreseeable future for the building of a Central Ambulance Station. This was aggravated to a considerable extent by the knowledge that the Home Office considered one of the existing stations which is shared with the Fire Service to be the worst in the Country.

The work carried out at each of the existing stations was sufficient only to make the station habitable and to fulfil the minimum requirements of men on operational duties.

#### *Vehicles*

One ambulance and one dual purpose vehicle were purchased and delivered during the year.

#### *Supplementary Services*

The existing arrangements with the Hospital Car Service, the Taxi Association and Avonmouth Docks Ambulance Committee continued to work well and thanks are due to the organisers of these services for the ready help provided and sustained throughout the period under review.

#### *Adjoining Authorities*

Close liaison was maintained between the Bristol Service and those of the adjoining services of Gloucestershire and Somerset County Councils. As a direct result of such liaison 6,215 cases were passed to other Authorities for conveyance in their own vehicles.

#### *Warning Device—Sirens*

Despite active representation through all available channels it was not possible to revert to the use of sirens as a warning device for ambulances on emergency journeys through the City. This was a great disappointment to service personnel because they realized to the full how much easier was the task of reaching accidents victims made by the use of the siren as a warning device and how much time could be saved by such means.

#### *Safe Driving Award*

In recognition of the efforts made by drivers in maintaining an accident free record throughout the year Committee approval was obtained for an evening function to be organised and awards to be presented by the Chairman of the Health Committee to the 65 men who were qualified to receive them. Such action gave an undoubtedly stimulus to all personnel to drive Service vehicles at all times with due care and attention and should do much to raise the standard of driving throughout the Service.

*Vehicle Maintenance*

The care and maintenance of vehicles was again in the safe hands of Mr. H. M. Ellis the Corporation Transport and Cleansing Officer. As a result of discussions with him and other interested people it was agreed that with the additional demands now being made upon the Service and the numbers of vehicles required on the road each day, it was necessary to increase the numbers of vehicles available to the Service. The prescribed steps were taken to bring this about including an amendment to the existing proposals agreed with the Ministry of Health.

Generally speaking the year was a difficult one from the point of view of day to day working and the inability to plan adequately for the future. It is hoped however that as a result of what has transpired throughout the year much good-will will be forthcoming as a direct result of increased appreciation of the work of the Service and the difficulties under which it has to operate at the present time.

Everyone in the Service is very much concerned with the care and comfort of the patients carried and the efficient and economical running of the Service. Given the necessary encouragement and help when and where necessary, there is no doubt that Bristol can and will have a Service of which it can be justly proud.



SECTION C

# ENVIRONMENTAL HEALTH SERVICES

F. J. Redstone, F.R.S.H., F.A.P.H.I.

(*Chief Public Health Inspector*)



## ENVIRONMENTAL HEALTH SERVICES

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## ENVIRONMENTAL HEALTH SERVICES

F. J. Redstone, F.R.S.H., F.A.P.H.I.

(Chief Public Health Inspector)

The past year has seen the arrival of many new and amending health and food laws. It is not generally recognised how extensive are the Acts, Orders and Regulations which have been passed to safeguard the health of the people. The Environmental Health Services are administered by officers who endeavour at all times to bring a friendly but firm approach to the many problems associated with this work and, although twelve months is a comparatively short time to assess progress an all-seeing eye on the year's work can again report trends towards improvement in many directions.

The air we breathe, conditions under which people live and work, the food we eat, the water we drink, adequate drainage, freedom from pests, are all matters which have again received concentrated attention by the Department. Progress in some of these important subjects is inevitably slow and one feels the need for early training in the schools and in the home which will bring about a greater appreciation of the rules and value of healthy living. This is particularly so in connection with the handling of food as it is evident that in spite of new and improved premises and equipment, methods of food handling in some quarters leave much to be desired.

This is reflected in the number of food poisoning cases and other illnesses which occur, many of which are due to the bad habits of some food handlers.

Members of the Health Committee raised questions on this important matter during the year and once again the Chief Public Health Inspector expressed the view that there was a need for the establishment of a food hygiene centre in the City. The object of such a scheme would be to train all employees in food establishments in the techniques and methods essential for the clean handling of food. Whilst this work would have to be continuous it is felt that the food trades and their employees would co-operate readily in a well organised scheme.

A comparatively new development is the number of food vending machines now being installed at bus stations, canteens, shops and various other sites within the City area. These machines, some of which dispense hot drinks and snacks, present special problems from a hygiene point of view and these developments are being closely watched.

The campaign for cleaner air has moved forward slowly during the year but already it is pleasing to receive comment that atmospheric conditions in the central smoke control area appear to be much improved and those of us who consider the air we breathe important to health are much heartened thereby.

Further steps towards the complete elimination of tuberculosis in dairy cattle have been made and it is pleasing to report that of all milk samples submitted for test in 1960, none was found infected with tubercle bacilli. This is a striking improvement from the days when many young people and others suffered from tuberculosis as a result of drinking infected cow's milk and much unhappiness and suffering is being avoided by the good work carried out by the veterinary profession in dealing with the health of live animals, together with the now widespread heat treatment of milk supplies.

The *Slaughterhouses Act, 1958* required local authorities to report on the present and future slaughtering requirements of their district. The Health Committee were faced with a need to integrate the slaughtering facilities within the City area and with a view to adopting the best possible layout and slaughtering system members of the Sanitary Sub-Committee made many visits to

newly constructed slaughterhouses in the South-Western region. The preparation of the Slaughterhouse Report submitted to the Minister and these associated visits absorbed much time and thought, which should, however, be amply repaid in the eventual result. A further step forward in the control of meat found to be unfit for human consumption was made by the passing of the Meat (Staining and Sterilisation) Regulations which came into operation on the 1st November, 1960. These Regulations are not in all ways a complete answer to this problem or to that of raw meat supplied through knacker's yards, but those concerned appear to be co-operative in this matter.

The need for new wholesale fruit, vegetable and fish markets in this City has been recognised for some time and active steps are now being taken to resolve problems associated with the siting and construction of new markets. During the early part of the year members of the Estates Committee made a tour of food markets in Nottingham, Sheffield, Leeds and Coventry. The Chief Public Health Inspector was invited, along with other officers, to accompany the members concerned on this tour and subsequently reported to the Estates Committee on the various public health aspects and facilities required in new markets.

The condition of housing accommodation forms a large part of the work performed by public health inspectors and in recent years, in accordance with the requirements of the Government, a great deal of attention has been paid to the clearance of unfit houses.

The duties to be carried out under the Housing Acts include many associated problems such as the closure of unfit basement dwellings and the re-conditioning of properties which it can be seen have further useful life. One of these problems now facing many large local authorities throughout the country is the condition of what has been termed "twilight" areas. These, according to Sir Keith Joseph, Parliamentary Secretary to the Ministry of Housing and Local Government, are "areas of old and out-dated houses, usually badly run-down and generally having a shabby and squalid air. Often, because of their condition, arrangement or setting, they are incapable of or not worth improving. In many cases, they include larger houses which are being used as was never intended, being occupied by several families without, however, providing adequate facilities for decent family living. Often they are badly overcrowded and lacking almost entirely in convenience, comfort and privacy. Though there is now much less overcrowding than there was, bad pockets remain here and there. These are the "black" spots of the "twilight areas". They are the first priority after the worst slums have been dealt with."

Areas of this kind are to be found in many towns and cities and cause many problems. Not the least of these is how best to establish satisfactory living conditions in the larger houses which, although originally built to accommodate one family, and perhaps servants, are now occupied by several. This change was bound to occur because this type of house is far too large for a single family today. The process has usually been hastened by a general deterioration of the standard of the district and, in some cases, by the arrival of immigrants. The trouble has been that little has been done to ensure that the houses are properly adapted for this change in their use.

The sharp and heavy rainfalls experienced from time to time during the year again caused serious flooding in certain parts of the City and much suffering and inconvenience was occasioned as a result. Many questions were raised about the need for a flood emergency scheme which would be brought into operation quickly in an endeavour to alleviate the aftermath of flooding. A central control for reporting these occurrences with a co-ordinated action from all the various departments concerned was evolved and the Public Health

Department assists with the drying of carpets and other household effects, the inspection of damaged foodstuffs and similar public health matters.

In addition, powers were included in a *Bristol Corporation Act* under which compensation may be made to the victims of flooding. The new and extensive sewerage scheme now being carried through by the City Engineer's Department will, in time, prevent these flooding incidents and this cannot be too soon for the people living in affected areas.

During the year the Rodent Control Officer retired and in future pest control work will be supervised by a senior public health inspector with resulting closer integration and efficiency of this work.

Since the Health Committee has been responsible for the control of the Diseases of Animals (Waste Foods) Order, 1951, a more frequent inspection of piggeries in the City has been undertaken. The value of this was emphasized during the widespread foot and mouth disease outbreaks and every effort was made by increased inspection to secure the adequate treatment of waste foods used for pig and poultry feeding.

The Managements of offensive trades situated within the City area have for some years been uncertain as to the future tenure of this class of business. This has been mainly due to planning proposals which envisaged the re-siting of these premises but this is no easy problem and during the year one firm who wished to carry out extensive works appealed against a 15-year planning permission for this work and the Ministry of Housing and Local Government allowed the appeal. The Chief Public Health Inspector then recommended that new bye-laws for the control of offensive trades should be applied for and this matter was receiving attention towards the end of the year.

The coming into operation of the *Caravan Sites and Control of Development Act, 1960* stressed the need for close collaboration with the Planning Officer and there is now an agreed scheme to deal with applications for the siting of caravans to be used for human habitation.

Although the *Offices Act, 1960*, has now been placed on the Statute Book it will not come into operation until 1st January, 1962. However, it is probable that a more comprehensive measure will be brought in even before that date and the new Bill will deal with health, welfare and safety in shops, offices and railway premises. The administration of such a measure will create an immense amount of work as many thousands of offices will have to be assessed against the new requirements and visited frequently to ascertain maintenance of satisfactory conditions.

The new Public Health Inspectors' Education Board issued the conditions of training to all local authorities and technical colleges and during October an approved training course commenced in Bristol. The foresight of the Bristol Health Committee in establishing a public health inspectors' trainee scheme some six years ago has been amply justified and, as a result, no difficulty was experienced in attaining the Board's requirements.

The following trainees qualified as Public Health Inspectors during 1960—Mr. M. J. Dimambro and Mr. N. Jacobs. Other examination successes by officers of the Division were:—Certificate of the Public Health Inspectors' Education Board—Mr. E. N. Stinchcombe. Certificate for Inspectors of Meat and Other Foods, Royal Society of Health—Mr. M. J. Abrams and Mr. H. M. Ellis. Certificate for Smoke Inspectors, Royal Society of Health—Mr. D. A. J. Herbert. Part II Final, Diploma of Municipal Administration—Mr. F. C. Henley.

In completing this opening statement I would like to record my thanks to all the staff for their excellent work during the year and to those who have contributed to this report.

## PUBLIC HEALTH INSPECTIONS

### Sanitation, Housing, Shops Acts, etc.

1959				1960			
Visits	Re-visits	Total		Visits	Re-visits	Total	
—	—	4,062	Complaints Visits:	—	—	—	—
4,091	11,666	15,757	Dwelling houses .. .	4,404	12,101	16,505	
4	7	11	Houses let in lodgings .. .	1	2	3	
3	3	6	Common lodging houses .. .	3	2	5	
188	206	394	Food shops—Registerable .. .	73	174	247	
1,126	1,541	2,667	Non registerable .. .	929	1,986	2,915	
148	205	353	Other shops .. .	148	347	495	
49	119	168	Bakehouses .. .	27	82	109	
210	722	932	Workplaces and offices .. .	228	476	704	
62	92	154	Factories—Non-mechanical .. .	30	51	81	
482	785	1,267	Mechanical .. .	328	524	852	
40	32	72	Outworkers .. .	48	19	67	
14	56	70	Removal of aged persons .. .	1	11	12	
16	38	54	Offensive trades .. .	19	89	108	
46	137	183	Entertainment places .. .	36	99	135	
22	181	203	Tents, vans and sheds .. .	30	280	310	
83	156	239	Keeping of animals .. .	30	91	121	
574	246	820	Food inspection .. .	556	238	794	
144	398	542	Sites .. .	146	432	578	
55	127	182	Institutions, hospitals, etc. .. .	69	116	185	
758	1,023	1,781	All other matters .. .	628	996	1,624	
—	—	—	Infectious disease visits .. .	—	—	—	
334	1,138	1,472	Clean Air Act—Smoke observations .. .	225	891	1,116	
2,088	—	2,088	—Smoke Control Areas .. .	5,540	9	5,549	
			New Chimneys .. .	31	1	32	
			New Furnaces .. .	33	10	43	

1959				1960			
In-ti-ma-tion	Statu-tory	Compliance		In-ti-ma-tion	Statu-tory	Compliance	
		I	S			I	S
324	442	213	326	Notices:—			
—	—	—	—	Dwelling houses (P.H.) .. .	507	518	205
—	—	—	—	Houses let in lodgings .. .	—	—	—
—	—	—	—	Common lodging houses .. .	—	—	—
7	—	2	—	Food shops—Registerable .. .	2	1	2
68	1	69	2	Non-registerable .. .	70	—	78
10	1	7	2	Other shops .. .	13	3	14
1	—	4	—	Bakehouses .. .	6	—	5
18	—	20	—	Workplaces and offices .. .	15	3	19
2	—	—	—	Factories—Non-mechanical .. .	—	—	—
24	—	30	—	Mechanical .. .	23	4	24
—	—	—	—	Outworkers .. .	—	—	—
—	—	—	—	Removal of aged persons .. .	—	—	—
—	—	—	—	Smoke observations .. .	1	—	—
—	—	—	—	Offensive trades .. .	—	—	—
—	—	—	—	Entertainment places .. .	1	4	1
1	—	1	—	Tents, vans and sheds .. .	2	2	1
1	2	3	1	Keeping of animals .. .	1	—	—
				All other matters .. .	5	—	2
				Smoke abatement .. .	—	1	—

**Sanitation, Housing, Shops Acts, etc.—Remedial Action**

<b>1959</b>			<b>1960</b>
	Drainage Works:—		
53	New drains laid	.. .. .. .. ..	44
226	Drains repaired	.. .. .. .. ..	270
679	Choked drains cleared	.. .. .. .. ..	937
182	Tests made	.. .. .. .. ..	166
	Sanitary Conveniences:—		
5	Flushing appliances introduced	.. .. .. .. ..	2
32	Additional closets fitted	.. .. .. .. ..	13
1	Separate closets for sexes provided	.. .. .. .. ..	4
15	New pans fitted	.. .. .. .. ..	20
—	Action re bathroom and geyser vent	.. .. .. .. ..	—
2	Urinals fitted	.. .. .. .. ..	3
90	Other works	.. .. .. .. ..	101
13	Intervening vent space provided	.. .. .. .. ..	13
2	Cesspools abolished	.. .. .. .. ..	—
	Water Supplies:—		
5	New and additional installations	.. .. .. .. ..	4
43	Hot water installed	.. .. .. .. ..	54
—	Wells closed	.. .. .. .. ..	—
	Other Sanitary Fittings:—		
11	New sinks fitted	.. .. .. .. ..	15
1	Additional sinks fitted	.. .. .. .. ..	3
51	Wash basins provided	.. .. .. .. ..	37
	Other Works:—		
176	Roofs repaired	.. .. .. .. ..	258
91	Dampness remedied	.. .. .. .. ..	135
337	Other new and repair works	.. .. .. .. ..	486
5	Yards paved and drained	.. .. .. .. ..	14
30	Houses cleansed—dirty	.. .. .. .. ..	17
137	—verminous	.. .. .. .. ..	66
1	Food store installed	.. .. .. .. ..	—
	Cooking facilities provided	.. .. .. .. ..	—
15	Lighting improved	.. .. .. .. ..	12
10	Ventilation improved	.. .. .. .. ..	11
1	Meal rooms provided	.. .. .. .. ..	—
10	Heating provided	.. .. .. .. ..	4
3	Exhumations	.. .. .. .. ..	2
	Keeping of Animals:—		
2	Removal of manure	.. .. .. .. ..	1
—	Provision of manure receptacles	.. .. .. .. ..	—
—	Drainage provided	.. .. .. .. ..	—
	Aged and Infirm Persons:—		
3	Removals—voluntary	.. .. .. .. ..	5
1	—Court Order	.. .. .. .. ..	2
	Smoke Observations:—		
11	Infringements—dealt with	.. .. .. .. ..	6
	Noise Nuisances:—		
9	Dealt with	.. .. .. .. ..	4
	Other Nuisances:—		
271	Dealt with	.. .. .. .. ..	284
	Food Hygiene Regulations, 1955:—		
150	Miscellaneous requirements	.. .. .. .. ..	152

**Repairs to Property in Owner's Default**

At the beginning of the year one case was outstanding from 1959; this was not proceeded with.

During the year 10 cases were referred to the Defaults Officer for consideration. Of these, 6 were repaired by the Corporation's contractor, 1 case was not proceeded with and 3 cases were pending at the end of the year.

Six orders were issued to various Corporation contractors and accounts totalling £55 9s. 11d. were passed for payment.

*Works by Agreement under Section 277 of the Public Health Act, 1936*

One such case was referred during the year. An order was issued and an account totalling £85 0s. 0d. was passed.

## FACTORIES ACTS, 1937 TO 1959

### Inspection of Factories

Premises (I)	Number on Register (2)	Number of Inspections (3)	Number of Written Notices (4)	Occupiers Prosecuted (5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities .. .	131	30	—	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority .. .	1,074	328	27	—
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises) .. .	89	366	9	—
Total .. .	1,303	724	36	—

### Cases in which Defects were Found

Particulars (I)	No. of cases in which defects were:—					No. of cases in which prosecu- tions were instituted (6)
	Found (2)	Remedied (3)	Referred to H.M. Inspector (4)	by H.M. Inspector (5)		
Want of cleanliness (S.1) .. .	12	17	—	—	9	—
Overcrowding (S.2) .. .	—	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—	—
Inadequate ventilation (S.4) .. .	4	4	—	—	1	—
Ineffective drainage of floors (S.6)	—	—	—	—	—	—
Sanitary Conveniences (S.7):—						
(a) Insufficient .. .	17	20	—	—	2	—
(b) Unsuitable or defective .. .	9	13	—	—	2	1
(c) Not separate for sexes .. .	1	1	—	—	2	—
Other offences against the Acts (not including offences relating to Outwork) .. .	—	—	—	—	—	—
Other works .. .	7	2	—	—	1	—
Total .. .	50	57	—	17	1	

## Part VIII of the Act

### Outwork

*(Sections 110 and 111)*

<i>Nature of Work</i>	<i>Section 110</i>			<i>Section 111</i>		
	<i>No. of out-workers</i>	<i>No. of cases of default in August</i>	<i>No. of prosecutions for failure to supply lists</i>	<i>No. of instances of work in unwholesome premises</i>	<i>Notices served</i>	<i>Prosecutions</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>	<i>(7)</i>
<b>Wearing apparel—</b>						
Making etc., Cleaning and						
Washing .. . . .	14	—	—	—	—	—
Shoes .. . . .	1	—	—	—	—	—
Household linen .. . . .	—	—	—	—	—	—
Wire embroidery .. . . .	1	—	—	—	—	—
Lace, lace curtains and nets .. . . .	—	—	—	—	—	—
Gloves .. . . .	8	—	—	—	—	—
Curtains and furniture hangings .. . . .	1	—	—	—	—	—
Embroidery .. . . .	1	—	—	—	—	—
Furniture and upholstery .. . . .	—	—	—	—	—	—
Electro-plate .. . . .	—	—	—	—	—	—
File making .. . . .	—	—	—	—	—	—
Brass and brass articles .. . . .	—	—	—	—	—	—
Fur pulling .. . . .	—	—	—	—	—	—
Iron and steel cables and chains .. . . .	—	—	—	—	—	—
Iron and steel anchors and grapnels .. . . .	—	—	—	—	—	—
Cart gear .. . . .	—	—	—	—	—	—
Locks, latches and keys .. . . .	—	—	—	—	—	—
Umbrellas, etc. .. . . .	—	—	—	—	—	—
Artificial flowers .. . . .	—	—	—	—	—	—
Nets, other than wire nets .. . . .	—	—	—	—	—	—
Tents .. . . .	—	—	—	—	—	—
Sacks .. . . .	—	—	—	—	—	—
Raquet and tennis balls .. . . .	—	—	—	—	—	—
Paper bags .. . . .	—	—	—	—	—	—
The making of boxes or other receptacles or parts thereof made wholly or partially of paper .. . . .	—	—	—	—	—	—
Brush making .. . . .	—	—	—	—	—	—
Pea picking .. . . .	—	—	—	—	—	—
Feather sorting .. . . .	—	—	—	—	—	—
Carding, etc. of buttons, etc. .. . . .	—	—	—	—	—	—
Stuffed toys .. . . .	—	—	—	—	—	—
Basket making .. . . .	—	—	—	—	—	—
Chocolates and sweetmeats .. . . .	—	—	—	—	—	—
Cosaque, Christmas stockings, etc. .. . . .	—	—	—	—	—	—
Textile .. . . .	—	—	—	—	—	—
Lampshades .. . . .	—	—	—	—	—	—
<b>TOTAL</b>	..	26	—	—	—	—

## HOUSING

Since 1954, when full scale clearance procedure was recommended, representations by the Medical Officer of Health had been followed by the appropriate Clearance Orders or Compulsory Purchase Orders, confirmation by the Minister following public inquiries; or in the case of individual houses Closing Orders or Demolition Orders were made. In the case of Clearance Areas the Council had satisfied themselves as to "unfitness and best method" by seeing a sample of the houses. Approximately 5,000 out of an estimated total of 10,000 had been dealt with in this way.

A change in policy, however, now envisages a sub-division of the remaining 5,000 houses still to be dealt with under the 1954/55 programme into two broad categories:-

- (a) Those individual or small groups that had a future housing potential if properly repaired and improved, estimated at 3,000 and—
- (b) those groups which in all the circumstances, were best dealt with by demolition (2,000).

Of the former class the Corporation are prepared to purchase selected houses by agreement and repair or if necessary rebuild where an owner is unable to do so.

With regard to the groups of houses to be demolished the Council views each house after representation, and proceeds normally to the declaration of the Clearance Area. Thereafter, to secure the demolition of the houses, the properties are acquired by agreement.

Since May 1960 no Clearance Orders or Compulsory Purchase Orders have, therefore, been made.

### *A Problem of Values*

In dealing with individual unfit houses the relationship between cost of works and the value of the house is of paramount importance in establishing "reasonable cost".

In the case of houses controlled by the *Rent Act*, the investment value is a sum obtained by capitalising the net annual income derived from rents.

Upon what basis must the net annual income be calculated—on the actual rent paid by the tenant or a rent that could be charged if the limits of the *Rent Act, 1957* were applied? Experience has shown that a "potential" value calculated on the latter basis can be as much as four times as a value calculated on the former. A house which could be repaired at reasonable cost on the one basis is not repairable at reasonable cost on the other.

Is it a good thing, in law, for a local authority to take action under the *Housing Act, 1957* on the assumption that a landlord would *always* charge as much as the law permitted; knowing as we do that a plot of land could be of greater value with the unfit house demolished than if it were repaired?

Some guidance on this point can be obtained from the case of *Leslie Maurice & Co. Ltd., v. Willesdon Corporation* (1953) where it was ruled that the material facts to be taken into consideration were those obtaining at the time action was taken. It would be wrong to presume, therefore, that an owner would always exercise his permissive right to increase rents.

If this basic principle is applied to decontrolled property where the rents are high either of itself or by reason of multi-occupation, then a very unrealistic value results; sometimes many times what a normal market value would be.

Conscious as we are of the permutation of housing circumstances which occur in practice, it is high time that the legislature gave local authorities some guidance on the general principles to be applied in the valuation of properties.

### *Rent Act, 1957*

The function of the local authority as between landlord and tenant in matters of the *Rent Act* is that of referee and in the main little difficulty is

experienced where the landlord and tenant act reasonably. The odd case does arise however, where the parties refuse to co-operate and the local authority's position is a difficult one, as a decision in favour of the one could lead to litigation by the other.

The tenant of a house made an application for a Certificate of Disrepair and in the absence of an undertaking the Certificate was issued. The items listed included broken and missing tiles to four fireplaces. The owner applied to the County Court and succeeded in his plea that the defective fireplaces were due to the tenant's neglect and misuse of the fixtures. The items were deleted from the Certificate.

The remaining works were attempted but to every application for cancellation the tenant objected successfully, using the time thus won to apply for a further Certificate of Disrepair on other defects. Eventually an application for the cancellation of both Certificates was received and notwithstanding a further objection the Council decided to cancel, whereupon the tenant applied for a third Certificate of Disrepair detailing the defective fireplaces which the Court had deleted from the first.

On the strict point of law it was appreciated that the local authority had to consider the application on its merit bearing in mind that it was not the Council's concern to inquire into obligation as between landlord and tenant or into the origin of any defect.

It was, however, realised that the effect of the issue of a Certificate of Disrepair would be to force the owner into the County Court again on an issue previously decided. To refuse to issue the Certificate would leave the local authority open to be proceeded against by the tenant.

It was decided to issue the Certificate and the owner was advised of the Council's proposal so to do, whereupon he gave an undertaking to remedy the defects.

The Council could under the permissive power vested in them by Paragraph 5 (a) of the First Schedule to the Act refuse to accept the undertaking and issue a Certificate instead. Having regard to all the facts, however, the undertaking was accepted.

Whilst the undertaking has still some months to run, the owner's effort to effect repairs to the fireplaces has so far proved abortive in that the tenant has refused the builder entry for the purpose of repair demanding new grates instead.

The end of the story has yet to be written but it is interesting to conjecture whether the owner will now apply to the Courts for possession.

#### *Cost of Demolition*

It was found necessary to make application to the County Court for the recovery of £130 as expenses incurred in the demolition of a house in default under Section 23, *Housing Act, 1957*.

The defaulting owner, who had been supplied with a detailed account of the expenses claimed that the charges were excessive, included items which could not be properly charged, and did not have regard to the proper value of salvable material. In fact, he contended that the demolition work could have been done for £30.

The house in question is situated at the end of a cul-de-sac and separated from the road by a forecourt, the rear wall of the building being, at one point, only 4 ft. away from a metal railing fence which separated the site from a railway cutting some 40 ft. below. Many of the metal railings were missing, broken and patched with odd materials. The house was physically connected to one other property so that the question of support was involved and its demolition such a complicated affair that special equipment had to be used.

In proving the case, the Corporation demonstrated by expert evidence that the situation of the house to the road, other buildings and railway demanded great care in demolition and that the time taken on the work was not excessive, and that the use of special equipment was justified by the circumstances. It was submitted by the Council that the value of salvable material was controlled by the market for it at the time the demolition was in progress,—the material had no value if it could not be sold.

The cost of coke for a fire and soap for washing were other points in dispute, but by far the most interesting issue was with regard to the erection of a timbered fence to protect the site against trespass by children. The Council submitted that trespass of children upon the site was such a likely thing to happen that danger from the defective railings could be anticipated, and that the Council had only done that which a prudent owner would do. The case of *Davis v. St. Mary's Demolition and Excavation Co. Ltd.*, was cited.

The Judge in summing up stated that he had to be satisfied that the apparent high cost of demolition were expenses actually incurred by the Corporation in the exercise of their default powers. Section 23, *Housing Act, 1957* stated, expenses "incurred" and not "reasonably incurred". The Judge also said that he was satisfied that the cost of erecting a fence could be properly included in the cost of demolition if it could be shown, as it was in this case, that the absence of fencing could lead to danger to children.

The Judge found for the Corporation with costs.

#### *Houses demolished*

The following table shows progress during the period 1955-1960 towards the total of 10,000 houses. Some 5,044 houses have so far been dealt with:

		1955 from 5th May	1956	1957	1958	1959	1960
Houses in Clearance Areas and already covered by operative Clearance Orders or Compulsory Purchase Orders.	Pre-war 138 Post-war up to 5.5.55. 73 } 211	26	11	28	8	23	17
Houses already in Clearance Areas and for which Clearance Orders or Compulsory Purchase Orders have been submitted to the Minister, but have not yet become operative.	Post-war up to 5.5.55. 56	—	65	3	4	—	—
Number of houses subject to operative Demolition Orders.	Pre-war and post-war up to 5.5.55. 238	—	18	6	7	23	2
Total demolished		26	94	152	61	81	28
Houses represented—Clearance Areas	537	1215	1191	371	143	135	
Demolition Orders made .. ..	44	32	21	8	23	29	
Certificates of Unfitness—Houses owned by Corporation .. ..	—	51	189	118	68	84	
Undertakings given by owners to demolish .. .. ..	—	14	14	16	9	61	
Unfit houses voluntarily demolished by Corporation and others ..	—	97	36	45	20	31	
Grand Totals	607	1503	1603	619	344	368	

### Bridging the Gap

The period between the declaration of a Clearance Area and the rehousing of the occupants can prove very difficult. The gap has to be bridged.

Whilst occupants normally, with the hope of better things to come will bear with fortitude and understanding a great deal of inconvenience and mental disturbance, circumstances do arise where in the interest of public health, action has to be taken, either by rehousing the family or requesting the owner to spend money on temporary repairs.

When danger is involved of course the occupants' safety must be the prime consideration and rehousing is effected with or without the owner's undertaking not to relet. The position is much more difficult, however, where normal urgent nuisances are involved. It is wrong that a tenant should be asked to suffer unsatisfactory conditions for an undefined period; equally it is undesirable that an owner should be requested to spend money on property where active steps have been taken for demolition. The service of Public Health Notices, though legally justifiable, may result in Court action and ultimately the carrying out of default works by the Corporation—all this against the background of ultimate demolition.

The problem is not a new one of course, but it has been rendered the more acute by the Corporation's policy of acquisition by negotiation. Some houses indeed are purchased much more quickly than they would be if orders were made, but there always remains a hard core of houses where the end of the road cannot be estimated.

### Housing and Sanitation

	1959	1960
	Houses Inspected:—	
—		
140	Section 9 .. . . . .	171
126	Section 16 .. . . . .	99
10,310	Clearance Area .. . . . .	
	Visits for improvement grants, estimated life and other matters .. . . . .	8,739
	Represented to Committee:—	
—		
140	Section 9 .. . . . .	171
209	Section 16 .. . . . .	135
	Clearance Area .. . . . .	
	Orders made:—	
—		
23	Demolition Order—(Section 17, <i>Housing Act, 1957</i> ) .. .	29
69	Closing Orders—Whole house (Section 17, <i>Housing Act, 1957</i> ) .. .	93
—	Closing Orders—Whole house (Section 17, SS. 3, <i>Housing Act, 1957</i> ) .. .	—
37	Closing Order—Underground rooms and parts of buildings (Section 18, <i>Housing Act, 1957</i> ) .. .	29
10	Closing Orders substituted for Demolition Orders—(Section 35, <i>Housing Act, 1957</i> ) .. .	—
1	Undertakings to repair accepted—(Section 16, <i>Housing Act, 1957</i> ) .. .	—
—	Undertakings not to use—(Section 16, <i>Housing Act, 1957</i> ) .. .	2
9	Undertakings to demolish—(Section 3 SS.4 <i>Financial Provisions Act, 1958</i> ) .. .	61
	Houses Repaired:—	
—		
—	Section 9—informal .. . . . .	—
—	Section 9—formal .. . . . .	—
4	Section 9—formal by Corporation in default .. . . . .	—
6	Undertakings to repair .. . . . .	1
2	Undertakings not to use, cancelled after repair .. . . . .	4
27	Other repairs .. . . . .	3
—	Closing Orders determined after repair .. . . . .	20
37	Demolition Orders cancelled .. . . . .	—
19	Certificates of Disrepair .. . . . .	20
1	Revocation of Certificates of Disrepair .. . . . .	13
	Refusal of Certificates of Disrepair .. . . . .	

## FOOD INSPECTION

### *Slaughtering Facilities*

The reports to be made under the *Slaughterhouses Act, 1958*, have made their mark in Bristol this past year. The Public Abattoir and Hotwells Lairs continue to supply the needs of the butchers in and around Bristol. Of the four private slaughterhouses attached to the bacon factories, one has ceased to operate. Considerable works were necessary to bring it up to standard, and factors such as the age of the occupier, the shortage of pigs and the cost of a new lease persuaded the occupier to close down. The other three slaughterhouses, are all in need of alteration to comply with the Regulations, but in the absence of an appointed day for compliance with the Regulation, work is progressing very slowly. All have provided locked accommodation for condemned meat. Pigs for the bacon trade are still in very short supply and it is difficult to determine whether it will be an economical proposition for the bacon curers to carry on.

The total number of animals slaughtered in the City shows a decrease of approximately 19·1 per cent (132,878 to 107,372). This decrease is due to the continued drop in the number of pigs slaughtered, 26·9 per cent (43,087 to 31,463). The drop in the number of sheep slaughtered, 34·05 per cent (69,110 to 45,573) was expected because the dry season of 1959 compelled farmers to send in large numbers of sheep for slaughter and this was bound to be reflected in this year's kill.

Cattle slaughtered showed a welcome increase of 38·98 per cent (18,030 to 25,059), with the principal increase occurring at Hotwells Lairs of approximately 76 per cent (5,717 to 10,063), and a satisfactory increase of 21·7 per cent (12,313 to 14,996) at the Abattoir. Most of the increased kill at Hotwells Lairs was due to the large influx of Irish cattle, amounting in all to 2,726 animals or 27·08 per cent of the total kill. Of the 14,996 cattle killed at the Abattoir, 1,300 or 8·6 per cent were Irish.

The effect of the Tuberculosis Eradication Orders of 1958/59 is now becoming apparent. In 1959, the percentage of cows and other bovines found to be affected with tuberculosis on post mortem examination was 7·89 per cent and 2·29 per cent respectively. This shows a considerable decrease but when the figures are split up into English, Irish and Reactors, the picture is even more favourable. Of the total kill of 25,059 cattle, 20,856 were English with 16 affected with tuberculosis or 0·07 per cent; Irish kill totalled 4,026 with 311 affected with tuberculosis or 7·72 per cent, and Reactors 177 killed with 115 affected with tuberculosis or 64·6 per cent. If this decrease is maintained throughout the country it would appear that tuberculosis in cattle will soon be eliminated. It also appears that with the eradication scheme fully operative, the general condition of all bovine animals has improved. This is shown by the decreasing number of animals found to be unfit for human consumption. One result of this is that it makes the collection of material for veterinary student examination purposes exceedingly difficult and specimens have to be cold stored for varying periods before the examinations are held. Calves slaughtered showed an increase of approximately 20 per cent (2,647 to 3,273.)

Animals affected with *Cysticercus Bovis*, show an increase (0·54 per cent to 0·98 per cent), (99 to 247). Broken down, the increased number of cows affected is 0·43 per cent to 0·63 per cent, and steers and heifers from 0·64 per cent to 1·25 per cent. It would appear that the increase is due to the high incidence found in the Irish cattle. Of the 4,026 Irish cattle killed, 104 were affected (including one case of generalised affection) or 2·58 per cent. Of the 21,033 English cattle killed, 143 were affected, or 0·67 per cent which compares very favourably with last year's figure of 0·54 per cent when very few Irish cattle

were killed. With the exception of the generalised case, all carcases were submitted to cold storage treatment and subsequently released for sale for human consumption.

#### *Public Abattoir, Gordon Road, Whitehall*

The Health Committee decided upon the introduction of charges for Chill Room storage from April 1st. The original intention regarding the Chill Room was that storage facilities, up to a limited period, should be given free as part of the Abattoir service. It was found, however, that in some cases excessive use was being made of this facility, resulting in severe congestion of accommodation and difficulties in connection with hanging equipment.

It was, therefore, decided that a reasonable period of three days for free Chill Room storage should be given, after which charges would be made. A simple system of indicating on each carcass the date of slaughter was adopted and a daily check made of all meat hanging in the Chill Room to ascertain what charges, if any, are due, on removal. Since the inception of this scheme the difficulties previously experienced have been substantially reduced.

#### *Slaughterhouses, including Bacon Factories*

The year 1960 will go down in history as an important year for the owners and occupiers of slaughterhouses. Under the *Slaughterhouses Act, 1958*, all local authorities were charged with the duty of inspecting all slaughterhouses within their areas and submitting their reports to the Minister not later than the 2nd November, 1960. Particulars of the reports were standard for the whole country but the detailed reports submitted to the owners of the slaughterhouses did not have to be reproduced in the report to the Minister. All local authorities, when submitting their reports, were required to recommend a day for full compliance with the Regulations. Many meetings and discussions were held during the year and, because of special difficulties, the Committee finally agreed to recommend July 1965, as the date for full compliance with the Regulations.

#### *Hotwells Lairs*

The above mentioned date was determined through the expiration of the lease at Hotwells Lairs. To integrate the Company using Hotwells Lairs with slaughtering procedure at the Public Abattoir means considerable re-building and re-organization, and meetings have been held to determine how this could best be accomplished. The cost of making Hotwells Lairs comply with the regulations is economically impracticable, having regard to its limited life as a slaughtering centre. However, under the Prevention of Cruelty Regulation, 1958, stunning pens must be provided in all cases where adult bovine animals are slaughtered, and as the last day for compliance with this Regulation is the 1st day of January 1963, consideration is being given to the provision of three light-weight stunning pens. Locked condemned meat room accommodation is being provided and some floors re-concreted. The existing mess rooms are being removed and accommodation for the slaughtering staff is being provided in the disused canteen.

Improvements to the three bacon factories are progressing slowly and it is hoped that the increase in the sow population will reflect an increased kill at the bacon factories with earlier completion of the Hygiene Regulations in consequence. The improvements to the lighting system at the Public Abattoir has, as yet, not been attempted, the reason being that an overall reconstruction is proposed, and the lighting arrangements would be attended to when these proposals are carried out.

The Abattoir was again extensively used for lectures and demonstrations to students taking one of the many courses held in Bristol, viz.—Diploma in Public Health, 4th and 5th Year Veterinary Students, Second Year Public Health Inspectors Trainees and the Meat & Other Foods Inspectors' Course. Many students, doctors and foreign visitors have been taken over the Abattoir and have commented favourably on the standard of hygiene prevailing there. It is hoped that in the reconstruction programme a suitable lecture and demonstration theatre will be provided. Such a room would also be useful for the occasional Health Committee meetings held at the Public Abattoir.

#### *Meat Inspection*

It is pleasing to record that a 100 per cent meat inspection service was provided during 1960 at the various slaughtering points. Fully qualified meat inspectors are always on duty at the Public Abattoir and Hotwells Lairs, assisted by full-time trainees who keep records and generally assist in the slaughterhouses. Peak slaughtering periods demand extra assistance and this is made available when required. Following the death last year of Mr. R. Brooks, Meat Inspector at Hotwells Lairs, Mr. A. D. Solomon undertook the duties of full-time meat inspection and is doing an excellent job. Sunday slaughter has been fairly consistent at Hotwells but only on very isolated occasions at the Public Abattoir. The sudden increase in slaughtering during October—December called for two inspectors to be on Sunday duty at the Lairs and a rota was worked successfully, with Mr. Howick from the Abattoir co-operating as required.

Various specimens have been submitted for confirmation and diagnosis to Dr. H. R. Cayton, Director of Public Health Laboratory Service, Canyng Hall, and our thanks are due to him and his staff. The value of this type of service can be gauged from the results of samples sent in from a cow slaughtered at the Abattoir. The animal was a casualty cow and the lesion on the peritonium and lymphatic nodes in general appeared to be a typical tubercular infection, and as the animal was from an area which had already been attested, it was decided to submit specimens to Canyng Hall. Their diagnosis of general multiple adeno carcinomatosis did not alter the decision as to fitness for food for human consumption but it did mean that veterinary inspectors of the Animal Health Division were not involved in re-testing the herd for tuberculosis.

Another very interesting case occurred at Hotwells Lairs. Acute lesions were found all over the entire surface of the back of a heifer, penetrating fairly deeply into the tissue, and appeared to resemble one of the *Actinomyces*. This was confirmed by Canyng Hall as *Actinomyces Bacillus Lignieresii* and the condition was so unusual that a short paper with photographs may be prepared on the case.

A total of 962 specimens of meat from bacon pigs were submitted to Dr. H. D. Crofton, Zoology Department, University of Bristol, for the detection of the parasite *Trichinella Spirallis*. Fortunately, no positive results were obtained from the digestion test and microscopical examination of the specimens. The total number of specimens submitted during the past few years now amounts to over 3,000 with only five positive results during this period. The results, prove that at present no routine test for *Trichinella Spirallis* is called for. This work is a voluntary effort on the part of Dr. Crofton and thanks are expressed to him for carrying out these and other tests and for his offer to examine any specimen submitted to him.

The system of meat marking introduced last year has been continued throughout the year. To obtain sufficient relief at the Abattoir and Hotwells during holidays and peak periods, it has been necessary to arrange for district inspectors, approved by the Minister, to hold and use a numbered stamp. It



TYPICAL GRANULAR LESIONS OF *ACHTHO BACILLUS LIGNIRESI* SHOWING DEPTH OF PENETRATION INTO MUSCULATURE. (IMMEDIATELY ABOVE RULER)



LESIONS OF ACTINO BACILLUS LIGNIERESI ON THE BACK OF A BOVINE CARCASS SHOWING  
THE DEPTH OF PENETRATION INTO THE MUSCLE (SEE POINT OF KNIFE)

must be remembered that affixing the stamp to any carcase indicates that on ante- and post-mortem examination no evidence of disease has been found. This fact makes it necessary for the inspector to be always on duty while killing is in progress, and means that the meat inspector has to be prepared to start work at varying times to suit the slaughtering unit.

#### *Meat Depots*

All meat depots in the Old Market Street area now have deep freezing units capable of holding imported frozen meat and offal. Most of them also recently installed band saws for cutting up this class of meat to give a better service to butchers. Imported chilled and frozen meat, as well as fresh meat from all over the country, is regularly received in these depots. With the exception of some Yugoslavian pork loins, and shoulder pieces, and one stack of frozen lamb carcases, very little trouble was experienced during the year. Trimming is at times resorted to and the occasional broken bone with diffused bleeding is found, but specific cases of diseased meat have been entirely absent this year. One new depot is in course of construction and from the plans the premises should attain good hygienic standards.

#### *Meat Transport*

The pattern of this supervision has been much the same as in previous years. Early morning visits are regularly made and a census of vehicles using the Abattoir during one average week was prepared for future reference. No prosecutions for contravention of the Hygiene Regulations in connection with meat transport, were instituted during the year, but warnings were sent in some cases.

#### *Canteens*

A number of spot visits were paid to the kitchens of the School Meals Service but very little trouble has been experienced this past year, although suppliers vary each time a fresh contract is awarded. In the event of any doubt about supplies received at any particular canteen a phone message enables the matter to be dealt with promptly.

#### *Knackers Yards*

Two premises are licensed as Knackers Yards in the City, but very little, if any, slaughtering has taken place at these premises. It is much easier to transport a dead animal and in the majority of cases animals received have been slaughtered elsewhere and not at licensed premises within the City.

#### *Piggeries*

Local authorities have, since 1957, been charged with the responsibility of enforcing the provisions of the Diseases of Animals (Waste Foods) Order. Staff difficulties have prevented a systematic and routine inspection of the class of premises mentioned in the Order, but reorganisation carried out during April enabled the number of visits made to be stepped up from approximately 160 in 1959 to nearly 300 during 1960. This was achieved by arranging for one of the inspectors assisting in meat inspection at the Abattoir, to spend the equivalent of two days a week for these visits.

The number of recorded small holdings in the City has fallen from 85 to 55. Of the 30 that closed, due to demolition of premises or for other reasons, 7 were previously licensed to boil swill.

The 55 small holdings in the City are sub-divided as:—

No.	Use	Licensed to Boil Swill
11	Keeping poultry only	2
15	,, pigs only	7
29	,, and poultry	15
		—
		24

Of the 31 unlicensed small holdings, eight may be licensed in the near future but the recommendation for licensing has not been approved to date because of—

- (a) Construction defects.
- (b) Change of feeding materials.
- (c) Variation in the number of live animals kept on the premises which affect license requirements.

Most of the piggeries are only of part-time occupation and it is, at times, difficult to find the occupier on the site to register specific complaints. Piggeries on land owned by the local authority are now of reasonable standard, and where trouble is experienced, reference to the appropriate department has the desired result.

#### *Pet Shops*

In July 1960 new regulations entitled The Meat (Staining and Sterilisation) Regulations, 1960, were introduced and came into operation on the 1st November, 1960. These regulations control the disposal of unfit meat from slaughterhouses or knackers yards and require that all unfit meat from a slaughterhouse must be sterilized on the premises. By arrangement with the local authority this class of meat can be moved to a recognised processor for treatment, and as no slaughterhouse in the City has the equipment to treat this class of meat, the local authority agreed to allow the two processors in the City to remove this unfit meat for treatment provided it was adequately stained. Meetings were held with the processors concerned and it was agreed that stain, in sprays, would be kept on the lorry to stain unfit meat collected from the slaughterhouse. The managements of knackers yards have an obligation to stain or sterilise all meat sold from the premises.

The owners of pet shops have been visited and the regulations explained to them. Very few are selling this class of meat, but where it is so sold all shopkeepers are supplied with a stain by the pet meat wholesalers so that the meat can be re-stained just prior to sale over the counter. Many pet shops are now selling imported boneless horse flesh, of which there appears to be a continuous supply. Correspondence is going on with the Ministry concerned to try and determine whether this horse flesh is, in fact, fit for human consumption. The Public Health (Imported Meat) Regulation does not define horse flesh, and consequently official certificates are not required for fitness. If this horse flesh receives suitable examination in the country concerned to be able to determine its fitness for food for human consumption, then no further action will be required in this country. Failure to determine this fact could mean that all this imported horse flesh would have to be treated as unfit for human consumption and would then have to be either stained or sterilized, depending upon whether the animal was slaughtered in a slaughterhouse or a knacker's yard.

#### *Cold Stores*

Regular routine visits are made to the Cold Stores in the City and the general standard of hygiene of the premises is good. New regulations came into force this year giving control over this class of premises, which had always been excluded from the earlier regulations.

### Legislation

New legislation affecting Meat Inspection which came into operation this year includes:—

The Meat (Staining & Sterilization) Regulation, 1960.

The Movement of Animals (Records) Order, 1960.

The Authorised Officers (Meat Inspection) Regulation, 1960.

The Food Hygiene (General) Regulation, 1960—which replaces The Food Hygiene Regulation, 1955—1957.

The Food Hygiene (Docks, Carriers etc.) Regulations, 1960—which controls premises exempted from the General Regulations.

### Inspection of Meat and Other Foods

1959	Visits:		1960
1,465	Slaughterhouses and bacon factories	..	1,251
50	Butchers' shops	.. .. ..	74
2,767	Fish shops	.. .. ..	2,781
43	Food preparing premises	.. .. ..	121
1,201	Meat markets	.. .. ..	1,211
—	Street traders	.. .. ..	—
213	Schools/Institutions	.. .. ..	197
224	Cold stores	.. .. ..	226
557	Other premises	.. .. ..	527
160	Piggeries	.. .. ..	298

### Fish and Canned Foods Condemned

1959	Fish				Other Foods				
	Tons	cwt.	qrs.	lb.	Tons	cwt.	qrs.	lb.	
1960	..	10	18	3	26	43	7	1	13
	..	6	1	3	15	35	12	1	21

### Meat Inspection—Animals Examined

1959					1960				
Hotwells	Lairs	Abattoir	Bacon Factories	Total and City	Hotwells	Lairs	Abattoir	Bacon Factories	Total and City
5,717	12,313	—	18,030	Beasts	10,063	14,996	—	25,059	
662	1,985	—	2,647	Calves	609	2,664	—	3,273	
43,003	26,107	—	69,110	Sheep	22,456	25,117	—	47,573	
16,887	14,070	12,130	43,087	Pigs	11,787	12,022	7,654	31,463	
—	4	—	4	Goats	2	2	—	—	4
66,269	54,479	12,130	132,878		44,917	54,801	7,654	107,372	

### Total Weight of Meat Condemned

1959				1960				
Tons	cwt.	qrs.	lb.	Tons	cwt.	qrs.	lb.	
64	11	1	27	Hotwells	53	6	0	21
131	5	2	7	Lairs	68	2	1	10
9	3	0	18	Abattoir	5	8	0	26
8	2	2	22	Bacon Factories	7	6	0	11
213	2	3	18	Butchers shops and City				

### 1959 Meat destroyed from:—

Tons		Tons
92·69	Slaughterhouses and Shops	.. ..
131·73	Abattoir	.. ..
—	Cold Stores	.. ..
43·49	Fish, poultry, vegetables, etc.	.. ..

### Carcases and Offal Inspected and Condemned in Whole or in Part

	Cows	Cattle Excluding Cows	Calves	Sheep	Pigs
Number killed	Hotwells Lairs Abattoir Bacon Factories	3,802 6,871 —	6,261 8,125 —	14,386 — —	609 2,664 —
Number inspected	Hotwells Lairs Abattoir Bacon Factories	3,802 6,871 —	6,261 8,125 —	14,386 — —	3,273 2,664 —
All diseases except Cysticercosis and Tuberculosis					
Whole carcase condemned	Hotwells Lairs Abattoir Bacon Factories	13 14 —	27 6 —	4 10 —	19 — —
Carcases of which some part or organ was condemned	Hotwells Lairs Abattoir Bacon Factories	2,175 3,029 —	5,204 2,726 —	3,181 5,907 —	9 37 —
Percentage of the number inspected affected with diseases other than Tuberculosis and Cysticercosis	Hotwells Lairs Abattoir Bacon Factories	57.29% 44.08% —	48.76% 33.55% —	50.80% 41.06% —	1.40% 1.39% —
Tuberculosis only	Hotwells Lairs Abattoir Bacon Factories	2 25 —	27 — —	15 9 —	24 4 —
Whole carcase condemned	Hotwells Lairs Abattoir Bacon Factories	10 105 —	115 58 —	269 327 —	4 4 —
Carcases of which some part or organ was condemned	Hotwells Lairs Abattoir Bacon Factories	0.26% 1.53% —	— 1.07% —	4.29% 0.71% —	0.15% 0.12% —
Percentage of the number inspected affected with tuberculosis	Hotwells Lairs Abattoir Bacon Factories	— — —	— — —	— — —	— — —
Cysticercosis only	Hotwells Lairs Abattoir	34 33	0.89% 0.48%	67 0.63%	139 180 —
Carcases of which some part or organ was condemned	Hotwells Lairs Abattoir	34 33	— 67	0.50%	138 41 —
Carcases submitted to treatment by refrigeration.	Hotwells Lairs Abattoir	— —	— —	— 1	179 — 1
Generalised and totally condemned					Totals
					173 74 —
					= 1.72% = 0.49% —
					$\sum = 247$ $\sum = 0.985\%$

## Carcases Condemned

		Hotwells Lairs				Abattoir				Bacon Factories/City				Total				Other Conditions 1959-1960	
		T.B.		Other Conditions		T.B.		Other Conditions		T.B.		Other Conditions		T.B.		Other Conditions			
		1959	1960	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960		
Cows	Carcases	60	2	13	13	155	25	40	14	—	—	—	—	215	27	53	27		
	Part carcasses	5	—	5	2	3	2	2	2	—	—	—	—	8	2	7	4		
Other Bovines	Carcases	7	15	1	5	37	9	22	6	—	—	—	—	44	24	23	11		
	Part carcasses	6	17	2	5	4	1	10	5	—	—	—	—	10	18	12	10		
Calves	Carcases	—	—	8	4	14	4	6	19	—	—	—	—	14	4	14	23		
	Part carcasses	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—		
Sheep	Carcases	—	—	111	56	—	—	—	81	37	—	—	—	—	—	—	—	192	
	Part carcasses	—	—	20	6	—	—	—	1	—	—	—	—	—	—	—	—	21	
Pigs	Carcases	1	—	158	40	8	5	124	24	10	2	20	12	19	7	302	76	30	
	Part carcasses	1	—	24	13	2	—	25	10	3	1	6	7	6	1	55	30		
Total	Carcases	68	17	291	118	214	43	279	100	10	2	20	12	292	62	584	230		
	Part carcasses	12	17	52	26	9	3	38	17	3	1	6	7	24	21	96	50		
Weight in lb.	Carcases	29193	9548	19895	11930	91862	18501	45391	15118	1578	291	2841	2356	122633	28340	68127	29404		
	Part carcasses	1630	2184	1976	757	1488	337	2635	1610	82	45	211	141	3200	2566	4822	2508		

**Schedule of Whole Carcasses and Part Carcasses Condemned  
indicating Disease or Condition**

	Cows	Steers and Heifers			Calves			Sheep			Pigs		
		Part Car- case		Car- case	Part Car- case		Car- case	Part Car- case		Car- case	Part Car- case		Car- case
		Car- case	Car- case	Car- case	Car- case	Car- case	Car- case	Car- case	Car- case	Car- case	Car- case	Car- case	Car- case
Abscess	..	..	..	1	1	—	2	—	—	—	2	4	13
Actinomyces	..	..	..	—	—	2	—	—	—	—	—	—	—
Arthritis	..	..	..	—	—	—	—	—	—	—	—	3	3
Bruising	..	..	..	1	2	1	5	—	—	1	1	—	4
Corynebacterium	..	..	..	—	—	—	—	—	—	—	—	3	9
Emaciation	..	..	..	1	—	—	—	1	—	48	—	1	—
Fevered	..	..	..	1	—	—	—	—	—	—	—	2	—
Immature	..	..	..	—	—	—	—	11	—	—	—	14	—
Jaundice	..	..	..	—	—	—	—	2	—	—	—	—	—
Johne's Disease	..	..	..	3	—	—	—	—	—	—	—	—	—
Lymphadenoma	..	..	..	1	—	—	—	—	—	—	—	—	—
Malignant }	..	..	..	1	—	—	—	—	—	—	—	—	—
Neoplasms }	..	..	..	—	—	—	—	—	—	—	—	—	—
Mastitis	..	..	..	2	—	—	—	—	—	—	—	—	1
Metritis	..	..	..	2	—	—	—	—	—	—	—	1	—
Moribund	..	..	..	—	—	—	—	—	—	3	—	4	—
Cysticercus }	..	..	..	—	—	1	—	—	—	—	—	—	—
Bovis }	..	..	..	—	—	1	—	—	—	—	—	—	—
Oedema	..	..	..	1	—	1	—	2	—	6	—	—	—
Pericarditis	..	..	..	—	1	—	—	—	—	—	—	—	—
Peritonitis—Septic	..	..	..	3	—	2	—	—	—	1	—	2	—
Pleurisy	..	..	..	—	—	—	3	—	—	—	3	—	—
Pleurisy—Septic	..	..	..	—	—	1	—	1	—	22	—	9	—
Pleurisy—Peritonitis	..	..	..	3	—	2	—	—	—	2	—	15	—
Pyaemia	..	..	..	1	—	—	—	5	—	1	—	8	—
Pneumonia Septic	..	..	..	—	—	—	—	—	—	1	—	5	—
Septicaemia	..	..	..	4	—	1	—	1	—	6	—	3	—
Swine Fever	..	..	..	—	—	—	—	—	—	—	—	1	—
Toxaemia	..	..	..	1	—	—	—	—	—	2	—	—	—
Urticaria	..	..	..	—	—	—	—	—	—	—	—	1	—
Uraemia	..	..	..	1	—	—	—	—	—	—	—	—	—
TOTAL	..	..	27	4	11	10	23	—	93	6	76	30	
Tuberculosis	..	..	27	2	24	18	4	—	—	—	7	1	
GRAND TOTAL	..	54	6	35	28	27	—	93	6	83	31		

Cattle affected with Cysticercosis:—

Cows 67; Steers and Heifers 180 = Total 247

## MILK AND FOOD INSPECTION

### *Legislation*

#### *The Milk (Special Designation) Regulations, 1960*

These replace two earlier sets of Regulations governing Tuberculin Tested, Pasteurised and Sterilised Milk. Principal amendments are that licences to use the designations are now valid for five years instead of one. Supplementary licences to enable a dairyman to trade in an area other than that of the licensing authority are abolished and the statutory tests of designated milks are changed.

#### *The Food Hygiene (General) Regulations, 1960 and The Food Hygiene (Docks, Carriers, etc.) Regulations, 1960.*

The former are amendments of the 1955 Regulations and the latter embraces food handling at places previously excluded from the earlier Regulations.

#### *The Public Health (Infectious Diseases) Amendment Regulations 1960*

These Regulations amend the 1953 Regulations by the inclusion of anthrax as a notifiable disease.

#### *The Fertilisers and Feeding Stuffs Regulations, 1960*

The Regulations amend the methods of analysis of these commodities.

#### *The Tuberculosis (England and Wales Attested Area) Order, 1960*

This Order is a landmark in the campaign against bovine tuberculosis. Under the Order, the Ministry of Agriculture, Fisheries and Food, . . . "is satisfied that tuberculosis of cattle is for practical purposes non-existent" . . . in the whole of England and Wales, with certain minor exceptions. In consequence all dairy herds in the country became subject to the requirements imposed in Attested Areas.

### *Matters of Special Interest*

#### *Coconut*

Following reports of the discovery of food poisoning organisms in imported desiccated coconut in other parts of the Country, a considerable number of samples were secured from local bakeries and bakers' sundriesmen.

In a few cases positive results were reported and steps were taken to ensure satisfactory treatment of the consignments before distribution. The same action was taken in respect of imports to Avonmouth, destined for City warehouses, upon which the Senior Port Health Inspector had received adverse reports.

#### *Fish Products*

Fish cakes and similar fish products came under suspicion as being, in some cases, infected with *staphylococcus aureus* and in consequence samples were secured from retailers and from a local cold storage warehouse.

A conference between the Medical Officer of Health and representatives of one of the manufacturers was held and their methods of production were explained. Sampling of these commodities continues in order to be certain that improvement will ensue.

#### *Alcoholic Sweets*

Imported toffee containing whisky or rum was submitted to the Public Analyst who found, in one sample, 12 per cent proof spirit. As this was considered rather considerable if consumed by a child, the Public Analyst

communicated with Customs and Excise Department and it was revealed that steps had been taken to confine future sales of this article to licensed premises. Subsequently, this became headline news in one of the national daily papers.

#### *Odorous meat pies*

A baker approached the Public Analyst for advice in regard to a very objectionable odour in a large number of meat pies he had made the previous day. Investigation by the District Inspector revealed that the ingredients included imported dehydrated onion, leading to a suspicion of the use of excessive sulphur dioxide preservative. Samples of onion heated in the laboratory, resulted in the odour complained of and it was concluded that there was a breakdown of the amyl sulphide naturally present in the onion.

The baker was satisfied to have found the cause of the trouble and ceased using this onion.

#### *Complaints*

The number of complaints made by the public about articles found in food does not diminish. A common one is in respect of rodent excreta in bread which usually turns out to be burned dough.

#### *"Rat's Paw" in pancake*

The most striking complaint received for a long time was made by a woman who found what appeared to be a "rat's paw" in her mouth whilst eating a home made pancake. The usual ingredients had been used, together with raisins. The Public Analyst's report was of a "foreign body almost black in colour  $\frac{5}{8}$ " long by  $\frac{1}{4}$ " wide, having a striking resemblance to a minute hand. Demonstrated microscopically it proved to be of vegetable origin, possibly part of a seed capsule". The Professor of Botany at the University was consulted and he reported it to be the pericarp of a fruit but positive identification was not possible.

The lady was justified in her supposition. A more realistic substitute for a rat's paw could hardly be made. It was concluded to have originated in the raisins and the retailing Company's representative who saw the specimen agreed to institute a more detailed examination of dried fruit when packing it in their shop.

#### *"Chewing gum" in tinned fruit*

A lady purchased a tin of imported apricots and found, adhering to the inside of the tin, what appeared to be a piece of chewed chewing gum. The Public Analyst reported it to be an adhesive rubber with zinc oxide plaster. The importers were informed. They undertook to take the matter up with the packers and to re-imburse the complainant.

#### *Oil in carrots*

An unpleasant flavour in cooked carrots was reported from a school kitchen. The Public Analyst confirmed an oily taint but could not isolate oil. Enquiries revealed a probability that vaporised oil from a tractor, used on the growing fields, may have penetrated the soil with some absorption by the carrots. They were unpalatable but not unfit for consumption and the School Meals Department were so informed.

#### *Legal Proceedings*

<i>Offence</i>	<i>Result</i>
Selling meat unfit for human consumption	Fine £25 and costs
Smoking in a food room .. .. ..	Fine £2
Smoking in a food room .. .. ..	Fine £2 2s.
Foreign body in a bottle of milk .. ..	Fine £75

In certain other cases warning letters were sent by the Town Clerk.

A shopkeeper who has been a listed seller of Part 2 Poisons for a number of years, ignored repeated reminders to renew his registration. He was also selling a Part 2 Poison incorrectly labelled. A summons for offences under the Pharmacy & Poisons Act was withdrawn upon his compliance before the date of hearing.

### Milk

#### *Chemical Analysis*

Some 902 samples of milk were submitted to the Public Analyst. Sixty-nine were deficient in fat but 46 of these were satisfactory on bulking and repeat samples of the remainder were satisfactory. Later samples of the 9 found to contain added water were also satisfactory; 7·64 per cent of all samples were deficient in fat. Over one-third of the samples were "Channel Islands" milk, i.e., by contract with the Milk Marketing Board required to contain at least 4 per cent fat; 15·4 per cent of these were below that standard compared with 1·92 per cent of milks not designated as "Channel Islands".

The decline in the non-fat solids content of milk has been of concern to the dairy trade for some years and schemes are in operation to improve the position. The percentages of samples taken in Bristol showing deficiencies in non-fat solids have fluctuated:—

1956	..	6·21 per cent
1957	..	2·2 per cent
1958	..	2·1 per cent
1959	..	4·35 per cent
1960	..	1·55 per cent

It would not be safe however to assume from the apparent improvements in 1960, that it is entirely due to the schemes mentioned above. Other factors such as climatic and economic conditions have some bearing on the matter and an assessment can only be made over a long period. Dairy companies experienced an increase in 1959 when there was a hot, dry summer.

It was not necessary to take legal action in respect of any milk samples last year.

#### *Biological Examination*

Nine of the 451 samples submitted were infected with brucellosis: these came from 6 producers. None was found to contain tubercle bacilli. In each case the milk was consigned to a processing dairy.

#### *Designated Milk*

Four hundred and fifty-two samples of pasteurised milk and 22 of sterilized milk were secured. None of the latter failed the statutory test but 11 pasteurised milks failed to pass the phosphatase test. These were from 5 different processors. Appropriate action was taken and repeat samples were satisfactory. Six samples of pasteurised milk failed the methylene blue test. There were 14 failures of the methylene blue test of 206 samples of tuberculin tested milk.

With reference to vending machines, a total of 300 samples was secured for the phosphatase or methylene blue tests or for chemical analysis. Five pasteurised milks from machines and 8 tuberculin tested milks failed the methylene blue test. These are included in those referred to above. Six were below the presumptive fat standard. From one machine an Inspector secured nothing for his sixpence, and on another day he received a carton only half full. From the same machine on another occasion, a carton of milk turned sour in the laboratory the next day. The operators were advised in all these cases and repeat samples were satisfactory.

*Ice Cream*

A development in Bristol in the manufacture and sale of ice cream has been the appearance of sales vans equipped with freezers, operated by an engine sited at the rear of the van. Ice cream mix is made in the factory, stored in closed containers in a cold cupboard on the van and fed into the freezer as required. It is served direct from the freezer and gives a softer ice cream than the factory-made type which undergoes a period in a hardening room. Many people prefer this ice cream to that to which they are accustomed.

Freezing is a necessary part of manufacture and when done on "premises" the latter are registrable. Vans, not being "premises", are not registrable. The vans from which soft ice cream is being sold in Bristol at present are completely satisfactory but it is open to an operator to purchase ice cream mix and to freeze it in a van under conditions which are less desirable.

All the 160 samples taken complied with the compositional standard and they were graded as follows:—

	1960	1959
<i>Grade</i>		
1	119	115
2	26	54
3	6	16
4	9	15
<i>Unclassified</i>	—	4
	<hr/> 160	<hr/> 204

Over 74 per cent attained Grade 1, compared with 56 per cent in 1959.

*Medicines and Drugs*

Seven hundred and twelve samples of medicines and drugs were submitted to the Public Analyst. Although repetition of sampling of the common varieties is unavoidable, it serves the purpose of keeping retailers and manufacturers aware that products available without a medical prescription are under scrutiny as will be seen from some of the typical faults found in samples secured during the year. A constant watch is kept for samples of new products available to the public.

Phenolated iodine	..	Ingredients deficient. Manufacture discontinued 4 years ago.
Tincture of quinine	..	Deficient in ammonia.
Rennet	..	Contained prohibited preservative.
Charcoal tablets	..	Incorrectly labelled.
Seidlitz powders	..	Incorrectly labelled
Tincture of iodine	..	Deficient in potassium iodide.
Halibut liver oil	..	Deficient in vitamin A.
Sal. volatile	..	Deficient in ammonia.
Powdered ginger	..	Contained exhausted ginger.
Gripe mixture	..	Badly dispensed.
Tartaric acid	..	Was citric acid.

A letter of appreciation was received from a well known company for having drawn their attention to a defective method of corking their bottles of halibut oil, resulting in loss of vitamins.

*Pharmacy and Poisons*

Fifty-one amples of articles likely to come within the control of the *Pharmacy and Poisons Act, 1933*, were obtained.

There are 471 persons on the local authority's list of those selling Part 2 poisons and 716 visits were paid to their premises during the year.

In 1959, formic acid was added to the list of Part 2 poisons. During 1960, it was found that certain types of adhesives to which the formic acid in the outfit

had to be added, were on sale at Model shops, garages, cabinet makers, iron-mongers and tool shops. Twenty-three retailers who were not "listed" sellers of this Part 2 poison were found.

Several samples of caustic soda were found to be improperly labelled. The wholesalers were advised and the matter was rectified.

During the year a number of articles have been purchased to ascertain whether they are or contained scheduled poisons. In some cases they are outside the scope of the Act but useful work is performed by such sampling as is evidenced by the purchase of a stain remover. The Public Analyst's report included "... a general observation on this type of collapsible tube pack is the danger of mistaking it for toothpaste or some foodstuffs which are now similarly packed". Attention was also drawn to the inconspicuous nature of the word "inflammable".

The manufacturers were advised of these comments and as a result they stated their intention of improving the pack and the warning.

#### *Sampling at Corporation Establishments*

One hundred and twenty-four samples of milk were submitted from schools and 498 samples of foods were secured from school kitchens. Plant defects were the cause of test failures in respect of 5 samples of milk. Steps were taken to rectify matters at the dairy.

#### *Fertilisers and Feeding Stuffs*

Forty-nine formal and 107 informal samples of fertilisers and of animal feeding stuffs were submitted.

The 24 minor infringements of the *Fertilisers and Feeding Stuffs Act* and Regulations, were dealt with by letter and repeat samples and no legal action was required.

#### *Notices*

Eighty notices and letters were issued in respect of infringements of the Food Hygiene Regulations, the Shops Act, Weeds, etc. Forty-seven notices were complied with and these included 11 outstanding from 1959.

**Dairies and Milkshops, etc.**

<i>1959</i>	<i>Registrations</i>	<i>1960</i>
<i>Milk and Dairies Regulations, 1949</i>		
62	Dairies .. .. .. .. .. .. ..	61
631	Distributors .. .. .. .. .. .. ..	659
<i>Food and Drugs Act, 1955</i>		
11	Manufacture, storage and sale of ice cream .. .. ..	10
1,394	Storage and sale of ice cream .. .. ..	1,455
240	Preparation of sausages or potted, pressed, pickled or preserved food .. .. .. .. ..	245
137	Fish frying premises .. .. .. .. ..	120
—	Butter factories .. .. .. .. ..	—
—	Wholesale dealers in margarine .. .. ..	—
<i>Licences</i>		
Quinquennial Licences issued under the:		
<i>Milk (Special Designation) Regulations, 1960</i>		
11	To process Pasteurised Milk .. .. .. .. ..	11
429	To sell .. .. .. .. ..	452
17	" " " (Supplementary licences) ..*	—
1	To process Sterilised Milk .. .. .. .. ..	1
529	To sell .. .. .. .. ..	546
13	" " " (Supplementary licences) ..*	—
45	To sell Tuberculin Tested Milk .. .. .. .. ..	20
6	" " " " (Supplementary licences) ..*	—
<b>1,051</b>	<b>Grand Total .. ..</b>	<b>1,030</b>

\*Under the above-named Regulations, supplementary milk licences are no longer required to be held by milk vendors who live outside the City but sell designated milk within the boundaries.

## Dairies and Milkshops, etc.

Samples not satisfactory		Chemical Analysis						Samples not satisfactory	
Samples Taken	1959							Taken	1960
1,079	173	Milk	..	..	..	..	..	902	78
182	—	Ice Cream	..	..	..	..	..	158	—
2,171	44	Other foods	..	..	..	..	..	2,344	78
595	16	Medicines and drugs	..	..	..	..	..	712	32
33	—	Poisons	..	..	..	..	..	51	4
33	—	Rag flock	..	..	..	..	..	35	1
136	6	Fertilisers and feeding stuffs	..	..	..	..	..	156	13
114	1	Water (Baths)	..	..	..	..	..	105	—
57	2	Water (Other)	..	..	..	..	..	63	1
125	43	Miscellaneous	..	..	..	..	..	173	65

#### *Bacteriological examination:—*

		Bacteriological examination.			
		Milk T.B. exam:	City ..	..	
464	3		Somerset ..		451
			Gloucestershire ..		9
			Other Counties ..		
218	6	Milk, pasteurised ..	..	..	328
20	—	Milk, sterilised ..	..	..	22
140	—	Milk, schools ..	..	..	124
180	35	Milk, T.T. ..	..	..	206
204	6	Ice Cream ..	..	..	160
96	—	Plant tests ..	..	..	103
447	84	Churn and bottle tests ..	..	..	346
59	14	Shellfish ..	..	..	61
72	3	Water ..	..	..	124
173	22	Miscellaneous samples ..	..	..	322
					41

### *Visits (Not Sampling)*

	Visits (Not Sampling)
684	Pharmacy and poisons .. . . . .
220	Dairies .. . . .
297	Ice Cream shops .. . . .
399	Other food premises .. . . .
760	Butchers shops .. . . .
44	Infectious diseases (except food poisoning) .. . . .
317	Dysentery .. . . .
223	Food poisoning .. . . .
66	Noxious weeds .. . . .
2	Rag flock .. . . .
674	Other Visits .. . . .

Notices

48	Informal notices served .. . . .	45
45	Informal notices complied with .. . . .	47
—	Statutory notices served .. . . .	—
—	Statutory notices complied with .. . . .	—

### *Remedial Action*

20	Premises altered and repaired .. . . .	18
33	Premises cleansed and decorated .. . . .	49
61	Other defects remedied (premises) .. . . .	57
52	Hot water handwashing facilities provided .. . . .	67
10	Heating provided .. . . .	10
—	Drainage—Drains tested .. . . .	—
1	Drains repaired .. . . .	—
1	Choked drains repaired .. . . .	—
1	Water closets—Flushing appliances provided .. . . .	—
—	New pans provided .. . . .	1
22	Other repairs .. . . .	18
16	Lighting provided .. . . .	19
37	Other nuisances abated .. . . .	65

**Other Registrations, Licences, etc.**

<i>1959</i>			<i>1960</i>
<i>The Rag Flock and Other Filling Materials Act, 1951</i>			
3	Licences to store rag flock	.. .. ..	3
30	Premises registered to use filling material	.. .. ..	30
<i>Pet Animals Act, 1951</i>			
33	Licences to keep a pet shop	.. .. ..	27
<i>Pharmacy and Poisons Act, 1933</i>			
466	Listed sellers of Part II poisons	.. .. ..	471
<i>Slaughter of Animals Act, 1933-1954</i>			
72	Licensed slaughtermen	.. .. ..	72
<i>Food and Drugs Act, 1955—Section 62</i>			
4	Licensed slaughterhouses (Bacon Factories)	.. .. ..	3
1	Licensed slaughterhouse	.. .. ..	1
2	Licensed knackers' yards	.. .. ..	2
<i>Public Health Act, 1936</i>			
Offensive trade—annual consent—			
6	Premises	.. .. .. .. ..	6
12	Trades	.. .. .. .. ..	10

**Statistics**

Samples submitted to the Public Analyst 1st January to 31st December 1960:

<i>1959</i>	Sampled under the <i>Food and Drugs Act</i> :		<i>1960</i>
2,948	Dry goods, spirits and drugs	.. .. ..	3,241
1,079	Milk	.. .. .. ..	902
<u>4,027</u>	Total	.. .. .. ..	<u>4,116</u>
114	Water, swimming baths	.. .. .. ..	105
57	Water, other	.. .. .. ..	63
33	Filling materials	.. .. .. ..	35
136	Fertilisers and feeding stuffs	.. .. ..	156
33	Poisons—Part II	.. .. .. ..	51
125	Miscellaneous	.. .. .. ..	173
<u>498</u>	Total	.. .. .. ..	<u>583</u>
<u>4,525</u>	GRAND TOTAL	.. .. .. ..	<u>4,699</u>

**Samples submitted to the Bacteriological Laboratory**  
**1st January to 31st December, 1960**

1959	Milk:—		1960
464	Tubercle examination	.. ..	451
180	Tuberculin tested	.. ..	206
218	Pasteurised	.. ..	328
140	Pasteurised (schools)	.. ..	124
20	Sterilised	.. ..	22
204	Ice Cream	.. ..	160
72	Water	.. ..	124
96	Plant tests	.. ..	103
447	Churn and bottle rinses	.. ..	346
59	Shellfish	.. ..	61
173	Miscellaneous	.. ..	322
<hr/>		TOTAL	<hr/> 2,247
2,073			

Adverse reports were received from the Bacteriological Laboratory in respect of the following samples:

1959	Milk:—		1960
13	Tuberculous*	.. ..	9
35	T.T.	.. ..	14
6	Processed	.. ..	16
31	Ice Cream—Grades 3 and 4	.. ..	15
—	Plant tests	.. ..	<hr/>
84	Churn and bottle rinses	.. ..	48
14	Shellfish	.. ..	9
<hr/>			
	Water:—		
	Baths	.. ..	<hr/>
3	Other	.. ..	3

\* Includes *B. Abortus*

Appropriate action was taken in all of the above cases.

#### *Food Hygiene Regulations*

The Food Hygiene Regulations, 1955–1957 were revoked and replaced by the Food Hygiene (General) Regulations, 1960, and the Food Hygiene (Docks, Carriers, etc.) Regulations, 1960. The Food Hygiene (General) Regulations deal with all food premises in the same manner as the previous Regulations but they have been extended to bring within their scope the handling and service of food on particular home going ships and certain other vessels. The ships and vessels to which the Regulations apply are in the main passenger ferries and river and coastal excursion vessels.

The new Regulations contain a number of amendments made in the light of experience gained during the operation of the original Regulations during the past five years.

The Food Hygiene (Docks, Carriers etc.) Regulations are designed to meet a long felt need for legislation to cover these undertakings as they were exempted from the operation of the Food Hygiene Regulations, 1955. By and large it can be said that these Regulations enact the same requirements for the clean handling of food upon the docks and other undertakings to which they apply as are contained in the Food Hygiene (General) Regulations relating to other premises.

#### *Public Swimming Baths*

There are 12 public swimming baths in the City. Of these 11 are owned by the Corporation and are under the control of the Baths Committee. Ten

of the baths are of the closed type and the remaining bath is an open-air swimming pool. The open-air bath and two of the indoor baths are closed for bathing purposes from October to March of each year.

The water source for all Corporation baths is mains supply and by reason of constant topping-up to compensate for normal water loss, adequate water changes are ensured. All baths water is treated on a continuous basis, varying from a  $2\frac{1}{2}$  to a 4 hour cycle for closed baths and every five hours in the open-air bath. Treatment in all cases consists of rapid pressure filtration, aeration, and break-point chlorination. Thermal storage or steam injection is employed in all closed baths for water heating and soda ash treatment ensures suitable alkalinity of the water in all cases. Field tests are taken at intervals throughout each day by Bath Superintendents to check on the residual chlorine figure.

The non-Corporation bath consists of a lake whose depth varies from 20' to 40' and has an estimated water capacity of 31,000,000 gallons. Water change is continuous, the lake being fed by a number of below-water-level springs. The water in the lake is clean and clear in appearance and since treatment is impracticable for such a large body of water, natural purification is relied upon.

Public health inspectors take monthly chemical samples of the waters of all public swimming baths. During the year under review all samples were satisfactory. No bacteriological sampling is carried out.

## ATMOSPHERIC POLLUTION

It is now two-and-a-half years since the *Clean Air Act* became fully operative. In that time the public and industry cannot have failed to have been touched in some respect by the many exhortations and references to the necessity of cleaning the air we breathe. That beneficial action has resulted is evidenced by the fall in the air pollution deposit gauge readings over the past four years. It is hoped, with the increased acreage of Smoke Control Areas operative, that the figures will fall even more, especially the level of floating pollution. In connection with the measurement of this suspended pollution—which of course is what we breathe—it is interesting to record that Bristol is one of a number of selected local authorities, who will be co-operating with D.S.I.R. in a national survey of the measurement of “floating” or aerosol pollution.

There is no doubt that domestic smoke is now the main overall cause of the atmospheric pollution in Bristol. The daily measurement of air pollution mentioned in the previous paragraph will be carried out in 1961 on a larger scale than hitherto, and will, surely give real evidence of the beneficial effects of existing Smoke Control Areas and also the need for smoke control in other areas. Apart from the reduction in the quantity of house coal in use as a result of smoke control there appears to be a voluntary change-over by householders from the use of house coal to smokeless fuels. In 1957 approximately 250,000 tons of house coal was used in Bristol, the figure for 1960 was approximately 225,000 tons.\* Another change in fuel trends that may have repercussions, and which is causing concern to many sanitarians, is the increased use of fuel-oil industrially and commercially. The lighter distillate oils are not involved, but the heavier residual fuel oils, even with blending, can have a relatively high sulphur content and sulphur dioxide measurement readings are likely to rise.

The increasing volume of vehicle exhaust fumes discharged at low level in our streets, is a problem that still has to be tackled; whether as a public health problem or traffic problem, it should not matter, so long as the achieved end

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\*This figure is a weighted assessment.

is the same. The presence of this type of urban pollution is repeatedly used as a red herring pulled across the path to smoke control. Nevertheless the nuisance and probable dangers to health caused by these vehicular fumes certainly warrant a full investigation into their prevention.

So much pollution in the past has been caused by new processes and industries being introduced without proper regard to the possible production of waste products—gaseous, liquid and solid—and their proper disposal. In many cases, it was not always known what nuisance might be caused, but in others it was obvious that certain emissions would occur but nothing was really done to control their dispersal until the Public Health Department investigated as a result of complaint. Because of their co-ordination with the Planning Department a great deal is done in Bristol by the Public Health Department to avoid subsequent nuisances when new factories are to be erected. At the planning approval stage the plans of the new factory are checked by the public health inspectors and any doubts about certain processes are allayed or subject to constructive criticism. More detailed remarks about this aspect of the Department's work are included in subsequent chapters. Within the scope of the existing methods of power and heat production, it is obvious that some degree of air pollution will be always with us. It is the important duty of Health Departments to see that it is a minimum degree.

#### *Smoke and Grit Emissions*

During the year fifty-two complaints regarding smoke, fume and grit emission were dealt with. These complaints were in connection with the following sources—

Industrial chimneys 20, Ships 1, Oil-fumes 3, Burning of rubbish 15, Burning of old cars 7, Burning of wood waste 3, Burning of grass 2, Chimney in Smoke Control Area 1.

Some of these were not direct complaints by the public but resulted from the observations of District Inspectors on routine inspection of their districts. Most of the industrial emissions were odd occurrences and did not necessitate more than a visit and caution given to the firm concerned. One oil-fired boiler plant gave rise to smut emission, usually on lighting up after the week-end shut down. This condition was cured by reducing the heating efficiency of the plant. This seemingly surprising measure was used because of the design lay-out of the boiler plant, which consisted of an oil-fired Economic Boiler with automatic modulating flame burner, plus a free-standing economiser. The chimney was a brick one, connected to the boilerplant by a relatively short metal flue. The heat transfer was exceedingly good, evidenced by the flue-gas temperature at the economiser outlet being as low as 302°F. Normally oil-smuts are due to the cooling of the flue-gases in the chimney, but in this case the flue-gases were already approaching dew-point. The answer was to by-pass the economiser, thus giving a higher flue-gas temperature at the chimney base.

One very big factory using a large quantity of coal each week, was the source of a widespread grit nuisance. The factory boilers are equipped with chain grate stokers, and multi-cell centrifugal grit arrestors and normally gave no trouble. Early one morning a flap-valve on the arrestors became stuck and grit was dispersed over a large area of domestic property. Following discussions and correspondence with the Chief Engineer, the firm not only tightened up their arrangements for checking the grit arrestors, but also, the National Coal Board were brought into the discussion because of the high degree of fines in the coal delivered.

The disposal of grass cuttings on a large scale, can be a problem even in dry weather, but during the wet summer of the past year, the disposal of the

cuttings in the City not only was a problem but caused nuisance. There is no outlet for the grass and the space needed for composting is so great as to make the measure an impracticability. Burning on the site is, therefore, resorted to, and if the grass is properly dry and burnt under proper supervision, makes a minimum of smoke. During the wet weather of last summer the grass was very rarely dry and on being burnt, only smouldered often through the night, causing justifiable complaint.

In this affluent age more and more cars are being bought and more and more old cars are being scrapped. To recover any useable metal can be a tedious and time consuming job if dismantling is resorted to, and scrap dealers realise it is easier to burn away unwanted materials from broken car bodies. The seven complaints about smoke from the burning of old cars were mainly in connection with cleared sites, where dealers had appropriated space for parking the old cars. The problem is one that will have to be kept in mind, not only because of air pollution, but of the condition in which some cleared sites get. In America it has got to the position where old car bodies are being taken in large numbers out to sea and dumped!

#### *Smoke Control*

The work of establishing smoke control areas continued in 1960 and Nos. 2, 3, 4 and 5, Smoke Control Orders were confirmed by the Minister of Housing and Local Government to become operative on September 1st, 1961. No. 6 Order was also submitted to the Minister for confirmation but at the end of the year this had not been given. The delay on the Minister's part is probably due to four householders making objection to the Order. Three of the objectors based their opposition on the cost of adapting fireplaces; the cost of smokeless fuels; fumes from the burning of coke; the proximity of railways and the principle of liberty for the individual. The fourth objector, although agreeing in principle with smoke control had an even more personal and material interest in the project. His job is that of chimney sweep and alleged that with the operation of the Order, his livelihood would suffer. He felt that he should be paid compensation for loss of business. Such is the price of progress!

The survey of further potential Smoke Control Areas in the City continued and in connection with this work, the Housing Department have co-operated in providing the necessary information on fireplaces in Council houses included in proposed Smoke Control Areas.

As smoke control develops so the administrative problems become more apparent. The time involved in the procedure laid down for the establishment of smoke control areas has been the subject of much complaint by local authorities and the prior approval procedure is one that should be dispensed with in the opinion of many authorities. Since the Minister appears to wish that Smoke Control Areas should become operative at the beginning of the heating season, it means that the timing of the various stages in procedure is very important. If there should be a delay at any point, then it can mean, in order to get the six months minimum period between confirmation and operation and also avoid the operative date falling within the winter months, that the proposed operative date is postponed. The most likely cause of delay is the receipt by the Minister of objections, necessitating a local public inquiry. To avoid these objections is important, but they are almost certain to occur at some time or another, even though there may be ready answers to the reasons for objection.

There is no doubt also, that until there is developed a solid smokeless fuel, incorporating the characteristics of being cheap, easy to light, long burning and being reasonably available, there will be complaints from some householders who have to use the existing solid smokeless fuels. Notwithstanding that

smokeless fuels used properly are good fuels, householders have been so used to the ease of lighting bituminous coal and maintaining a fire in old-fashioned stool and fret grates, that to have to use some thought and method in relation to modern firegrates and fuel is too much inconvenience to some. Plenty has been said and written in one way or another about the effects of air pollution and the benefits to be derived by removal of domestic smoke from our air; most people accept that it is a bad thing to throw so much dirt into the air, and that the principle of smoke control is sound and proper. But the stage has now come when the education should go further. Householders living in a proposed Smoke Control Area are apprehensive about the cost, use and heating ability of the smokeless fuels. The Coal Utilisation Council, the Gas Board and the Solid Smokeless Fuels Federation do a great deal to educate people in the proper use of fuels but their impact is to a great degree limited. The householder to-day does not wish to journey to learn something and this means that the facilities have to be taken to them. For that reason it is hoped, with the co-operation of the Housing Department for at least one house to be available in each Housing Estate, to demonstrate smokeless fuels in use.

The National Coal Board are hoping in the near future to introduce a new carbonised fuel, the result of research at Stoke Orchard Laboratories. In addition, the South-Western Gas Board are investigating the possibilities of producing "Cleanglow" at the local gas works. The availability of suitable coal seems to be the factor which will decide its advent. The new National Coal Board fuel and "Cleanglow" are both reactive smokeless fuels.

Two enquiries from interested firms were put to the Public Health Department regarding the acceptability of two fuels in Smoke Control Areas. One fuel was a briquette made from anthracite duff and partly carbonised; the other was a briquette made from Irish peat by great pressure; both made some smoke on burning. In any event it is not local authorities who decide on the "acceptability" of any fuel in a Smoke Control Area and since neither fuel could be said to fall within a category listed in the Authorised Fuel Regulations, both firms were advised to write to the Ministry of Housing and Local Government.

It may be remembered in the previous year's report, the case of the lady, who was annoyed that whilst her house was included in the No. 1 Smoke Control Area, the opposite side of the street was not. The reason for making the boundary where it was, was explained and she seemed satisfied. In the early part of 1960, this same lady complained that she could not burn coke and other smokeless fuels satisfactorily, and asked if she could burn bituminous coal; amongst other things she pleaded health reasons. A visit by the Deputy Medical Officer of Health and a Senior District Inspector resulted in the Inspector spending an evening with the lady and her sister to show conclusively how easy it was to ignite gas coke with gas ignition and to maintain a good fire with a minimum of effort. These personal approaches by the officers often achieve far more than pages of written publicity and advice.

#### *Smoke Control Publicity*

Many hours, both inside and out of the normal working day, have been spent in talking to the public, usually in groups such as women's guilds, about atmospheric pollution and smoke control areas; in most cases a film has been shown. Printed publicity has been also much used and apart from that emanating directly from the Public Health Department, an issue of the "Civic News" was devoted to atmospheric pollution. In Hartcliffe, an area included in the proposed No. 6 Smoke Control Area, the united churches publish a magazine called "Hartcliffe Herald". An article and photographs dealing with smoke control were included in the autumn issue of this magazine.

As the Smoke Control campaign spreads to affect more and more of the City, it becomes increasingly apparent that the question is not just the simple one of—"Do Bristolians want clean air or are they content with a smoky grimy City?". The problem is not only scientific and administrative; it is an economic one. The industrialist and householder want to know not only when and how we are going to reduce pollution, but how much is it going to cost. That cost must seem to give good value. It is, therefore, necessary to show clearly the benefits that are going to accrue to a city from the clearance of smoke from its atmosphere.

#### *New Chimneys*

During the year 40 plans submitted in accordance with building bye-law requirements showed that new chimneys were to be erected. Of these chimneys 33 were considered of sufficient height, but 7 were subject of discussions with the proposers and were increased in height before the plans were approved.

The erection of high chimneys can be a costly business, and as a means for attaining draught, can be replaced by fans. They can also be an architectural "eyesore". However, to prevent nuisance and get proper dispersal of potent flue gases, a high chimney is the only economic and practicable method.

By the time this report is published a well-known landmark in central Bristol will have disappeared, namely the Fry's old factory chimney. Its demolition was necessary in order to make way for new development. Since this brick chimney served the boilers used for heating the factory—now used by H. M. Stationery Office—a new metal stack 116 ft. high has been installed and because it is sited close to the building is not so obtrusive as the old stack.

In some of the cases where new chimneys are to be erected, the proposers have approached the Public Health Department prior to submitting plans. Discussions on the chimney heights have saved time and subsequent delay in approval.

#### *New Furnaces*

Of the 39 new furnaces installed during 1960 all but one were oil-fired and this trend indicates the grip that oil-fuel has upon the architects' and industry's outlook. The "odd man out" is a small sectional boiler fired with bituminous coal by underfeed stoker.

#### *Special Industries*

The Eastville gas works were a subject of complaint by one person and although many visits by the Deputy Medical Officer of Health, the Chief Public Health Inspector, the Senior District Inspector and the Alkali Inspector were made to the complainant's house and to the works, no relevant evidence could be found to substantiate the complaint.

One of the duties of the Public Health Department is to prevent nuisance as far as possible and where new industrial projects are brought to the notice of the Corporation it is usual for the Health Department to be informed and asked for their observations. In this category came two new plants—one for the preparation of beryllium-copper and the other a tar distillery with all its ancillary processes. It was considered advisable that both projects should be investigated fully before approval was given and in each case a meeting of all officers concerned was called under the Chairmanship of the Medical Officer of Health. Representatives of the two firms were invited to attend the appropriate meeting and all aspects of the processes were discussed.

In the case of the beryllium alloy works, the main public health concern was the possibility of emissions of toxic beryllium compounds. Firm assurances

being given that these emissions would not occur, together with the knowledge that monitoring both inside and outside the works would be maintained, made it possible to agree to the development.

Tar distilleries are associated with smells—phenolic, tarry, and others—and concern was felt that the siting of the new works should not be such as to cause nuisance to food warehouses in the vicinity. At the close of the year this project was still being considered by the local authority.

#### *Railways*

During the year the Bath Road Motive Power Depot was closed down and all cleaning and maintenance work transferred to St. Philip's Marsh. This action is a preliminary to the building of a depot for diesel engined locomotives being built to replace the steam locomotives.

#### *Meetings in Connection with Atmospheric Pollution*

In October a very well attended sessional meeting of the Royal Society of Health in the Council House, was partly devoted to the reading by Mr. A. H. Clarke, F.R.I.B.A., A.M.T.P.I., City Architect, Bristol of a paper entitled "Clean Air and Buildings".

Earlier in the year the Bristol and West Clean Air Committee held a meeting at Bath. The meeting was given an address by Mr. A. Marsh, Director, National Society for Clean Air, on the progress of the Clean Air Act and another by Mr. T. Silvey, Chairman of the Bristol Coal Merchant's Association on the Clean Air Act from the Coal Merchants' point of view.

At the request of The Bristol Coal Merchants' Association, the Chief Public Health Inspector attended one of the Association's meetings and spoke to the Members on Smoke Control in Bristol.

#### *Concrete Mixing Plant*

In January, planning approval was given to the establishment of a ready-mix concrete plant at Clay Hill. The site seems to have caused adverse public reaction for some time and for various reasons. Originally it was a quarry in which eventually accumulated a deep pool of water. The condition of the fences and the danger of the deep water provoked complaint from the nearby householders. Consequently, filling-in was carried out by the dumping of builders' rubble, but as so often happens at tips, other material, in this case, waste paper was tipped. Considerable hydrogen sulphide smells were generated which again provoked complaints. After that matter was settled, complaint was made about clouds of dust in dry weather and mud in wet weather, caused by trucks travelling to and from the quarry-tip. Then a consolidated part of the tip was approved for the site of the ready-mix concrete plant. Immediately an outcry arose about the development and the industrialisation of the area. A meeting was held on the site attended by elected Council members and officers to discuss the matter with the house-holders. Assurances were given that the plant would cause no nuisance.

## GENERAL ENVIRONMENTAL HEALTH WORK

### *River Pollution*

Particularly since the Industrial Revolution, rivers have been the natural outlet for waste discharges of many kinds. The two rivers that flow through Bristol, the Avon and the Frome, are no exception to this. Since the Avon, joined by the River Frome, has its estuary within the boundary of Bristol County Borough, they receive a considerable quantity of pollution before they enter the City. However, the work of the River Board and the desire by the local authorities and industrial concerns to appreciably reduce the degree of pollution will result in much cleaner rivers in the not too distant future.

The year opened with a request from the Bristol River Avon Board for the Medical Officer of Health to provide evidence for a public inquiry in support of a new sewage disposal system for the South-West Area of Gloucester County. In order to do this the sewage works of neighbouring local authorities whose sewage works discharged treated, partially treated and crude sewage into the Frome, were inspected. The river was also examined within the City boundary and water and swab sampling was carried out. A Senior Public Health Inspector prepared evidence for the Local Inquiry which was subsequently attended by the Deputy Medical Officer of Health and the Senior Public Health Inspector. The Minister of Housing and Local Government has now approved a scheme to dispense with the offending sewage disposal plants and the connection of South-West Gloucestershire sewers to Bristol's main drainage scheme. When this scheme is in operation the daily flow of some 1,600,000 gallons of sewage effluents will cease to be discharged into the Frome.

New and additional works to local authority sewage treatment plants in the Somerset area will improve the state of the River Avon before it reaches the eastern boundary of the City and when the new sewage disposal works have been constructed at Avonmouth a daily flow of approximately 50—60 million gallons of sewage and trade wastes from Bristol itself, will cease to flow into the river. This, as can be imagined, is a major engineering project, but every step is a welcome move towards the reduction of pollution of the rivers of our City.

At the request of the Medical Officer of Health another investigation which was carried out during the year by the Chief Public Health Inspector was an examination of the extent of swimming in the Rivers Avon and Frome and an assessment of the potential danger to health from such a practice. The investigation proved that swimming in rivers had reached a very low level. Nevertheless, it was considered that whilst the rivers were receiving heavy pollution everything should be done to discourage swimming. Water sampling of the rivers provided positive evidence of the dangers which could result from this use of rivers. It is apparent that two main factors have in themselves brought about the voluntary dis-use of rivers for swimming purposes:—

- (1) The appreciation by the general public, through local and national publicity, of the state of rivers and,
- (2) The adequate provision and dispersal of swimming baths throughout the City.

Following the investigation, a meeting was called by the Medical Officer of Health and representatives of the River Board, City Engineer's Department, Public Health Laboratory, City Analyst, Police, Port of Bristol Authority and Chief Public Health Inspector and others attended and discussed ways of discouraging bathing in the rivers. In particular, it was suggested that the Education Department should take the opportunity of warning school-children of the health hazards attending swimming in rivers. The Medical Officer of Health reporting on this matter to the Health Committee said— "It is not

numerically a big problem but potentially it might be a serious one". The Health Committee decided that other Corporation Departments should be asked to assist in this campaign and as a result, the matter was referred to the joint Health and Education Committee and the Planning & Public Works Committee.

The introduction during 1960 of the *Clean Rivers (Estuaries and Tidal Waters) Act*, now brings new and altered outlets and discharges into tidal waters, under the control of River Boards. River Boards are advised by the Minister of Housing and Local Government to liaise with "interested bodies" in laying down satisfactory conditions for new and altered outlets and discharges, and the Public Health Department is always prepared to assist in any way towards this end.

#### *Civil Defence*

As a nation we are known to adopt an attitude of "Don't worry it may never happen". This in itself can be regarded as a good health measure since it does not encourage ulcers. The maxim however, cannot be unduly adopted since preparedness is a valuable asset when an emergency arises. "Civil Defence is commonsense" says the caption and with this one cannot disagree.

War is our last desire, but if it does occur the public health inspectors of this country will need to be ready with advice and assistance in many directions. Any future war of a nuclear character will undoubtedly result in a considerable death-roll, heavy casualties, mass evacuation of large numbers of people to a safe area, untold destruction of properties, disruption of sewer systems and water mains, radio-active contamination of foodstuffs and water supplies and many other factors. It is at such times and under such circumstances that environmental hygiene and sanitation are of paramount importance. Under peace-time conditions safe water, safe food supplies and proper sewage disposal measures, are matters to which the general public give little thought. They will have little idea of the field measures which can and must be adopted following the dislocation of these services. Historically infestations and disease have played a major role in times of war and in any future war our lives may yet again be endangered by "Biological Warfare" of our own making.

It is important, therefore, that the extent of the problem should be reasonably assessed and that public health inspectors should be trained in Civil Defence in order that they may be able to assist and advise on environmental control measures necessary under the war-time circumstances.

During the year two Senior District Inspectors were invited to attend refresher training courses in Civil Defence and Emergency Feeding and these commenced during October. Active roles are also played in Civil Defence exercises held in the City. During September, the Chief Public Health Inspector was invited to participate in a large scale sub-regional exercise named "More Reliance" and for this a model ground was prepared which illustrated what can be done in the way of hygiene and sanitation in the field. Three of the Inspectorial staff acted as umpires and demonstrators during the exercise and subsequently a full scale report was submitted to the South-Western Regional Hospital Board. In the final exercise report high tribute was paid to the public health inspectors for their work and the constructive criticism contained in their report which referred, amongst other things, to a generally apathetic approach to matters of hygiene and suggested that instruction in field sanitation should be included in the training programmes of all Civil Defence Units.

### *The Caravan Sites and Control of Development Act, 1960*

The *Caravan Sites and Control of Development Act, 1960*, came into operation on 29th August, 1960. Part I of the Act deals with the licensing and control of caravan sites whilst Part II is concerned with the general control of development from the planning point of view. The Health Department's officers are, therefore, concerned with matters within Part I of the Act. This legislation makes a fundamental change in the basis of the control of caravans, so that Section 269 of the *Public Health Act, 1936*, ceases to have effect in relation to caravans. Whereas under the provisions of the *Public Health Act, 1936* the local authority could either issue a licence for the use of land as a caravan site or issue a licence authorising the use of a particular caravan, under the provisions of the *Caravan Sites and Control of Development Act, 1960*, the licence can only apply to a site and individual caravans can no longer be licensed.

Whereas the *Public Health Act* allowed a caravan to be stationed in any place for a period not exceeding 42 days before an offence against Section 269 had been committed, the new Act allows a period of only 2 nights before a licence is required.

The Minister has issued model standards for the guidance of local authorities in drawing up their licence conditions.

### *Sewerage*

The arrangements regarding sewage and sewage disposal in Bristol County Borough are under the control of the Planning & Public Works Committee.

The system at present in use dates back to the middle of the last century and is inadequate having regard to the present size of the City. Crude discharge to the tidal reaches of the River Avon is the present final disposal method. To ameliorate the odour nuisance during the summer months chlorine treatment of the sewage outfalls and river itself have been in operation for the last 20 years.

A major scheme designed to collect and treat the sewage of the City and discharge the effluent to the Severn, just north of the mouth of the River Avon, is at present under construction, and as successive stages of these works come into operation a progressive improvement in the condition of the River Avon, as it runs through the City, should result.

### *Aged Persons*

The enforcement of the provisions of Section 47 of the *National Assistance Act, 1948*, and of the *National Assistance (Amendment) Act, 1951*, involving the compulsory removal of an aged person from his or her home to an appropriate institution is unpleasant and often distressing for all concerned.

Every effort is made by the officers of the Health Department to persuade people who are in urgent need of care to enter an institution voluntarily and the success of this policy is proved by the fact that in the last 9 years compulsory removal has had to be resorted to on only 13 occasions, an average of only 3 people every 2 years. There are probably some 6,000—8,000 aged persons in the City who, but for the welfare work which is being constantly pursued, would quickly become cases for removal.

The result of this welfare work is that the basis for compulsory removal is changing in emphasis from the insanitary conditions in which people live to the physical illness from which they are suffering and cases are, therefore, far more likely to become matters for medical action than for action by the public health inspector.

During 1960, 4 cases were taken of which 2 were husband and wife.

### Goram Fair

The Goram Fair which has not had a settled site for some years, was held this year at the Ashton Court Estate, which is now owned by Bristol Corporation. In other years the Public Health Department has been actively concerned with the hygiene and sanitation of the fair-ground. The Ashton Court site, however, is not within the administrative area of the Bristol County Borough Council, but in the Long Ashton Rural District. In view of past experience, it was arranged that the Senior District Inspector concerned with the Fair in previous years, should visit the site with an Officer from Long Ashton Rural District Council's Public Health Department in order to discuss the sanitary and hygienic arrangements to be made at the Fair. Further combined visits were made during the holding of the Fair.

### Health Education

The desire to be better informed on environmental health aspects of life has again been evident from the number of invitations extended to the Chief Public Health Inspector and his staff during the year to give talks, demonstrations and film shows to all sections of the community. Encouragement and education towards better health through preventive measures, is promoted in many ways—the press, magazines, pamphlets, radio and television and these all make a valuable contribution to the improvement of health in general. Many feel, however, that the greatest impact can be made by the education work of the local health department. An active health department backed by good speakers and a variety of visual aids has many ready audiences and through this medium people of all ages can make a greater contribution to the health of the community. There are few amongst us who are not willing to listen and learn. The incessant "why" of our childhood remains with us through life as we seek knowledge and when the "why" has been answered there is a greater understanding of our responsibilities to the maintenance of health in ourselves and others. There are many impediments to health and to the control of illness and disease because there is very often lack of appreciation of what is harmful or why it is harmful. This is where health education is valuable. It is not a question of lecturing to people but of talking to them. It is the informal approach which develops the personal understanding and more co-operative attitude. For some, any new campaign towards improvement of our environment creates the impression that "Here once again is another bee in the bonnet of the health department." The hygiene of food handling, the reduction of atmospheric pollution, the control of insect pests and other matters may appear to be unnecessary intrusions on their freedom. This is where the Health Department has the opportunity of winning over the unbeliever. A good deal of thought has been given during the year to the subject of Clean Air since this facet of health is much to the fore at the present time as the result of the smoke control work of the Department. Gas and Electricity Board films "Window to the Sky" and "The Future is Electric" respectively are on long-term loan to the Health Department and are used in connection with talks designed to demonstrate the purpose and effects of the work, towards cleaner air. A talk and an appropriate film are a useful and convincing means of illustrating this and other aspects of health education.

On 19 occasions during the year talks and demonstrations were given to a total number of 600 children. Talks on environmental health matters were given to 530 members of the general public, who represented a variety of organizations. Special food hygiene talks and demonstrations were given to 320 people in various sections of the food trade including Licensed Victuallers, Industrial Caterers, a Store training school, Institute of Packaging and the

University catering staff. A hospital group once again requested talks and this included demonstrations and films for 90 of their hospital catering staff. Altogether films were shown on 30 occasions and film strips on 17.

The interest shown by the various audiences and their invitations to "Come again" is proof in themselves of the public response to health education.

#### *Technical Training*

The Chief Public Health Inspector and his staff have again taken an active part in numerous technical courses where environmental health forms the whole or part of the curricula. Apart from those courses which are designed specifically for the training and further education of public health inspectors, lectures were given, and where requested visits arranged, for health visitors, pre-nursing classes, food handling courses, house matrons, nurses' training classes of a hospital and an Institute of Housing course.

The growing demand for public health inspectors with special training in atmospheric pollution again resulted in a Smoke Inspectors' Course being arranged through the Engineering Department of the Bristol Technical College. The consistent attendance of inspectors, some from local authorities distant from Bristol, is proof of the value placed upon such courses. An opportunity for further education of public health inspectors in micro-biology of food inspection was made possible during the year following the arrangement by the College of Advanced Technology of a specially designed course on this subject. The implementation of a course of this character which has been a long felt need is very much appreciated by inspectors in the Western Region and the help and advice of the Medical Officer of Health and the Advanced College of Technology is greatly appreciated.

By far the most important event of the year was the introduction by the Public Health Inspectors' Education Board of a new scheme of training. The basic theoretical and practical training programme was laid down by the Board, but the way in which training courses were to be implemented was left, subject to the approval of the Education Board, to individual training centres. The Medical Officer of Health, Head of Department (Building), Bristol Technical College, and the Chief Public Health Inspector gave considerable thought to the new scheme and following joint discussions decided that a part-time two day release course, over a period of 4 years, was best suited to the needs of local authorities and students in the Western Region. The few large centres of population in the West are widely dispersed and students are, therefore, drawn from a number of counties, including some in South Wales, and from local authorities of varying sizes. Distance of travel and the need in some cases to remain in Bristol overnight, were factors which had to be considered.

Whereas the basic recommendation of the Board was for a part-time one day release scheme, it was considered that this left insufficient time for comprehensive instruction or adequate opportunity for tutorial work. Furthermore it would not enable students to take full advantage of the excellent practical facilities afforded by the Advanced College of Science and Technology and the Bristol Technical College. Apart from college training it was felt that since Bristol County Borough is able to provide practical visits on almost every aspect of the training programme, time should be set aside so that advantage could be taken of the facilities available.

The two day release scheme allows continuity of instruction with adequate time for further study and practical instruction at approved training centres and this is much appreciated by the students. There are 13 students on the course which commenced in early October.

Consideration was given initially to the introduction of a sandwich course, that is six months in College and six months with a local authority over a training period of three years and the possibility of this type of course is to be reviewed at a future date.

#### *Trainee Public Health Inspectors*

The establishment of 6 trainees has again been maintained throughout the year and no difficulty has been experienced in filling posts as they have become vacant. As in other parts of the country, there has been no spate of applications, but sufficient have been forthcoming to enable the right type of young man to be appointed. It is important that trainees should have a good educational background and a genuine vocational approach to environmental health work. Every applicant is made fully aware of the nature of the work and is thereby given an opportunity to assess, in his own mind, whether this is a profession for which he is physically and mentally suited. Young men coming straight from school need to be fully informed of the nature of the work on which they are attempting to embark and great stress is laid on the ability of any applicant to face up to the educational and enforcement aspects of the work. So far this initial care has resulted in the appointment of trainees whose enthusiasm for the work has developed with each stage of their training.

It is important too, that trainees should be regarded as such and whilst they take an active part in clerical, administrative and practical work they are not assigned to permanent duties. A regular change over from one section to another, every 6 months, that is, Port Health, Food and Drugs, Housing, Meat Inspection and general district work, gives them an opportunity of good experience in environmental health work as a whole and prevents the boredom which could result from lack of variety in training.

During the year 2 trainees were successful in the qualifying examination of the Public Health Inspectors' Education Board and were subsequently appointed to the Bristol staff. One vacancy was outstanding from 1959, so that during the year under review three trainee vacancies were filled. At the present time five trainees are attending the new training course at the Bristol Technical College and one is re-sitting the qualifying examination in early 1961.

The new examination scheme which is discussed elsewhere in the report under "Technical Training", came into being during 1960 and the revised training at the Technical College which is on the basis of a part-time two day release scheme, commenced in October. The combination of adequate opportunities for theoretical and practical work each week is greatly appreciated by trainees and must result in well-informed and adequately trained public health inspectors of the future.

#### *Foreign Visitors*

Once again visitors from overseas have studied the work of the Environmental Health Services in Bristol. The visitors were from Malta, Chile, West Africa, India, Malaya and the Sudan.

Our friends from overseas are very appreciative of the discussions which take place and the tours which are arranged for them. It is a pleasure to meet them and to demonstrate the preventive health work which is carried out in this City.

## RAT DESTRUCTION DISINFECTION AND DISINFESTATION

### *Rodent Control*

The work of rodent control followed the usual pattern until the retirement of the Rat (Repression) Officer in May 1960. The Deputy Chief Public Health Inspector was responsible for the control of rat repression work until August, when Mr. G. E. Bennett, a Senior District Public Health Inspector was appointed to take charge of the rat repression service. Other duties assigned to this Officer were, to act as a consultant to the Disinfecting Station Superintendent for problems in connection with insect infestation, consultant to a group of six district public health inspectors on all district matters, and to be the Flooding Emergency Officer of the Health Department.

Since August, the emphasis of the work has changed, from considering the rat as an ever present problem to the rat as a pest that can and should be eliminated. More consideration is now being given to the source of rat infestations and the number of routine inspections of places likely to create rat harbourage and infestations has been greatly increased.

A major item in the work of pest control for the latter portion of the year has been the start of a widespread programme for the extermination of the common rat in the City sewers.

The only method to prevent re-infestation by rat migration is to deal with the sewers in drainage catchment areas and for this purpose the City was divided into three specific areas, each area to be a complete programme. The area of the City south of the River Avon and New Cut was selected to be programme No. 1. 1960.

There are four drainage catchment areas in this programme and the work was phased accordingly into the following groups of districts:—

- Phase I St. Anne's, Brislington, West Town, Stockwood.
- Phase II Knowle, Whitchurch, Hengrove, Gilda Estate.
- Phase III Knowle West, Bedminster Down, Highridge, Hartcliffe, Bishopsworth, Withywood.
- Phase IV Ashton Gate, Bedminster, Lr. Knowle, Southville, Knowle Park, Totterdown.

Considerable thought was given to the materials to be used and it was decided that the most satisfactory and economical poison to obtain the required results was:—

3 (1-Phenyl-2-acetyl-ethyl-4-hydroxycoumarin-4-hydroxy-3-1-phenylbotan-3-on-1-yl-coumarin—commonly known as Warfarin, this poison being of the chronic type as distinct from the zinc-phosphide and arsenious oxide formulations, it is unnecessary to use prebaiting methods and therefore the first bait-laid contains the actual poison.

Full consultation was held with officers of the Ministry of Agriculture, Fisheries and Food over the extent and nature of the programme, together with the materials to be employed and agreement was reached on the use of Warfarin in the City sewers on an experimental basis.

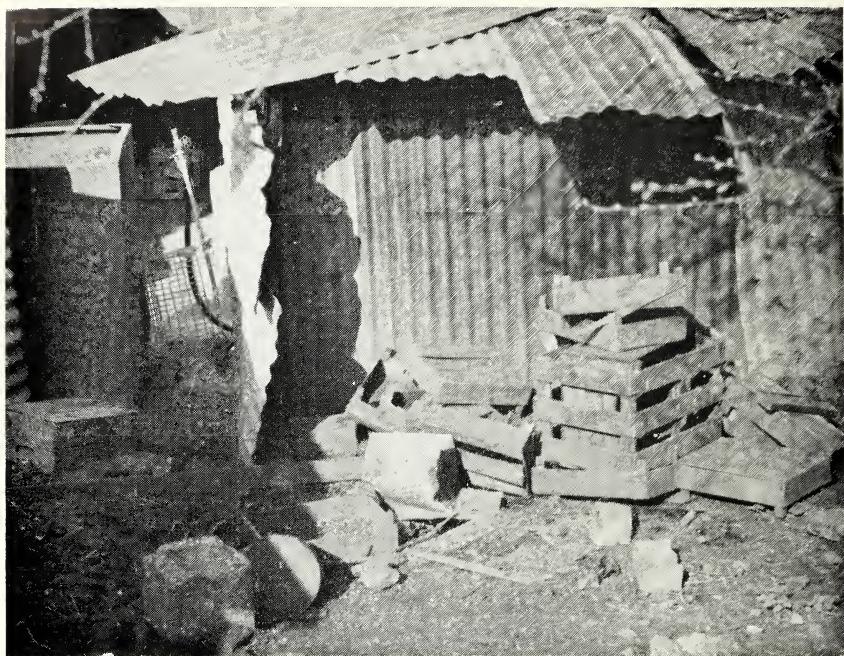
The interest of the Ministry in this work is considerable as Bristol is one of the first local authorities to use Warfarin for the control of the common rat in sewers. The actual work of baiting was commenced on the 31st October and was still in progress at the end of the year.



SEWER BAITING OPERATION IN PROGRESS BY THE CITY ENGINEER'S STAFF AT ONE OF THE 5,127 MANHOLES IN PROGRAMME NO. 1 WHICH COVERED THE SOUTH OF THE CITY



EVEN THE BURIED MANHOLE COVER MUST BE LOCATED BY THE CITY ENGINEER'S STAFF IF THE SEWER BAITING PROGRAMME IS TO BE EFFECTIVE



AN EXAMPLE OF CONDITIONS CONDUCIVE TO RAT HARBOURAGE FOUND DURING  
ONE OF THE MANY ROUTINE INSPECTIONS CARRIED OUT IN THE CITY



PHOTOGRAPH OF A RAT, ON WASTE GROUND, MOVING TOWARDS FOOD WHICH  
HAS BEEN DELIBERATELY THROWN THERE FOR BIRDS

The table of results gives an indication of the success of the programme, of the fluctuation of the rat population in the sewers and the amount of work achieved by seven men in the field.

Phase No.	1	2	3	4	Total
Manholes visited ..	1,012	678	1,552	1,650*	4,892*
Visits required ..	2,353	1,454	2,964*	2,164*	8,935*
Complete bait takes ..	34	1	Nil*	8*	43*
Part bait takes ..	54	31	Nil*	127*	212*
Estimated rat kill ..	838	276	Nil*	943*	2,057*

Figures not completed by 31st December 1960:— \*

The first half yearly sewer treatment was made on the usual lines previous to the re-organisation and the figures below give the result of that treatment:—

No. of manholes baited .. .. ..	875
No. of manholes showing prebait take .. ..	466
No. of manholes showing poison take .. ..	396
No. of manholes showing complete poison take ..	Nil

As part of the drive against rats special treatment was carried out on vacant sites and brooks, and over 2,500 baits have been laid and results show nearly 60 per cent take of baits.

Perhaps the most satisfactory part of this work has been an increase in the number of notifications from the general public about dead and dying rats observed.

### Rat Repression—Summary of work done during 1960

1959				1960			
Business	Premises	Houses	Other	Business	Premises	Houses	Other
34	51	27	112	Complaints incompletely dealt with brought forward ..	37	48	28 113
771	1,627	485	2,883	Complaints received ..	789	1,485	421 2,695
805	1,678	512	2,995		826	1,533	449 2,808
<i>Remedial action:—</i>							
<i>Infestation cleared:—</i>							
746	1,437	474	2,657	By Corporation ..	744	1,297	425 2,466
8	72	1	81	By occupiers ..	9	69	2 80
14	121	9	144	No action required ..	35	115	6 156
37	48	28	113	Incompletion at end of year carried forward ..	38	52	16 106
805	1,678	512	2,995		826	1,533	449 2,808

Under Paragraph 1 of Section 2 of the *Prevention of Damage by Pests Act (1949)*, 2,622 occupiers notified the Department that their premises were infested with rats or mice.

Verbal notices were served on owners or occupiers of 73 premises drawing attention to the conditions which were giving rise to the infestation and which required certain works to be carried out. In all cases these notices were complied with.

Defective drainage systems continue to cause rat infestations and 116 cases have been referred to the district public health inspectors for appropriate action to be taken.

The Offensive Trades areas in the City have been subject to a more rigorous routine treatment. Also more attention has been paid to the 45 miles of river banks within the City, and the large number of vacant and derelict plots of land.

A few of the more unusual cases of mice infestation were found in the ventilating ducts of a large multiple store in Broadmead, under the seats of two of the City's main theatres, and in the organ in one of Bristol's churches, where they were eating leather washers on the pipes.

Special attention has been paid to building construction sites where drainage systems are opened for reconstruction, and this has resulted in only three complaints during the year from cases of this nature.

All the Corporation refuse tips are regularly inspected and at present are reasonably clear of infestation.

The following table shows the number of rats recovered from all sources:—

1959			1960		
Avon-mouth	Bristol head	Total	Avon-mouth	Bristol head	Total
<i>Rats recovered:—</i>					
<i>Docks, quays, wharves, etc.</i>					
2	—	—	2	Brown .. ..	4
28	45	—	73	Black .. ..	106
—	—	—	—	Mice .. ..	—
<i>City:—</i>					
—	77	—	77	Brown .. ..	64
—	176	—	176	Black .. ..	34
—	23	—	23	Examined for plague	63
—	28	—	28	Mice .. ..	41
<i>Grand total—</i>			<i>Grand total—</i>		
328 rats recovered			208 rats recovered		

The difference in the figures for 1960 compared with 1959 is due to the fact that in 1959 a considerable number of premises within the dock areas were classified as City premises for the purpose of this return.

There were the usual complaints regarding wasps nests and it is interesting to note the lengthening of the "wasp season", the last complaint for the year being November 30th.

#### *Wasp Complaints*

		1960	1959
Destroyed	.. .. ..	570	508
Advised	.. .. ..	32	105

During the year there was an increase in the number of complaints of damage by foxes, badgers, and squirrels. Where it has been possible to locate the actual "earth" or "sett" appropriate measures have been taken.

As the year closed there was a slight increase in complaints of mice infestations over the whole City and it would appear that 1961 may show an increase in the number of mice dealt with.

Generally, the year can be reviewed with satisfaction but, there are two aspects of pest control which should be given more consideration by the public generally.

The first is the alarming rapidity with which occupiers of new buildings in the centre of the City and new flats report mice infestations. The importation

of mice in packing cases and materials is considered to be the prime cause, and investigations are to be started to find ways of preventing this transfer of vermin.

The second point to which attention should be paid is the frequent practice of the public of throwing food for birds on to roads and pavements, docks, wharves and vacant ground. To put food anywhere but on a bird table is to feed both rats and mice. It is known that feeding pigeons at the Centre by throwing food on to the adjacent quays has been directly responsible for the creation of a troublesome rat infestation at the outfall of the River Frome near the statue of Neptune.

#### *Disinfection and Disinfestation*

Once again the Disinfecting Station has played an active role in the preventive work of the Department and the co-operation of the Superintendent and Station staff in coping with the many emergencies which arose outside normal working hours is to be commended.

The disinfection or disinfestation of some 60,000 articles at the Station indicates the measure of work performed by the Station staff. In addition, 12,234 premises were disinfected or spray-disinfested during the year, this incurring 3,000 more visits than in 1959. An increase in work was also brought about in the collection and disposal of condemned foodstuffs from food premises throughout the City and from dock areas. Altogether over 45,000 cans and some 19,000 lb. weight of other foodstuffs were collected and disposed of in a satisfactory manner.

The soiled linen collection, laundering and return service has also shown a marked increase, so much so that owing to limited facilities, laundering at the Disinfecting Station had to be abandoned. The clothing is now being washed, by arrangement, at a laundry attached to a large Welfare Services Home for the Aged. In 1957, the service involved 40 calls each week for collection and return of linen. This has now increased to 294. The number of articles collected in 1957 was 201, whilst at the present time this has grown to almost 900. By careful routing and arrangement of transport, the distance travelled for this service has only increased by 98 miles.

The heavy periods of rainfall during the latter part of the year which resulted in flooding of parts of the City again called for the services of the Station staff. During the months of August and December the Station was open night and day for some time, and disinfection of affected properties and drying of bedding, clothing, carpets and furniture was carried out. Assistance was also given to outside authorities where properties were similarly affected by flooding.

A number of large-scale disinfecting and disinfestation jobs were performed including an area of houses affected with beetles, an Education Department site infested with caterpillars, a large licensed restaurant in the City which had been infested with pharoahs ants, cockroaches and crickets, treatment of a Civil Defence store, theatre wardrobe rooms and the costume store rooms of a drama club. Regular disinfection of the animal houses and dissecting rooms of the Medical Department and the Anatomy Department fo the Veterinary School of Bristol University also was carried out. Special schools of the Bristol Education Department sited in Somerset, were treated for cockroach infestation. Putting the carcase of a chicken into the dustbin of a dwelling resulted, ultimately, in a large scale maggot infestation of houses in the surrounding area.

An additional duty was taken on by the Disinfecting Station staff during the year, that of disinfecting all equipment returned to the Medical Equipment Loan Service store which adjoins the Station.

**Disinfections, Drain Tests, etc.**

	<i>1959</i>		<i>1960</i>
9,175	Premises disinfected ..	.. .. .. ..	12,234
53,968	Articles disinfected ..	.. .. .. ..	56,694
3,125	Articles disinfested ..	.. .. .. ..	3,259
3,672	Articles destroyed ..	.. .. .. ..	3,137
539	Vermin repression—by spraying ..	.. .. ..	390
100	Vermin baths— men ..	.. .. ..	122
2	— women ..	.. .. ..	2
57	Disinfections for hospitals and nursing homes ..	..	61
402	Public library books collected and disinfected ..	..	49
292	Private library books collected and disinfected ..	..	10
44,935	Foodstuffs, etc., destroyed—canned food ..	..	45,691
11,345		other foodstuffs ..	19,322 lb.
675	Food premises visited ..	.. .. .. ..	760
43	Drain tests ..	.. .. .. ..	39
3,027	Other work ..	.. .. .. ..	3,737

# ADMINISTRATION OF THE SHOPS ACT, 1950 AND KINDRED LEGISLATION DURING 1960

## SHOPS ACT, 1950

### *General Administration*

The *Shops Act, 1950*, which was introduced to consolidate the *Shops Acts, 1912 to 1938* and certain other enactments relating to shops, has again survived without amendments. New hope for more up to date legislation was revived by a statement in Parliament that the Government proposes to introduce legislation dealing with health, welfare and safety in shops, offices and railway premises, but it is not anticipated that this will mean any alteration to some of the more controversial issues, such as Sunday trading restrictions and the closing hours for shops.

A new interpretation on the phrase "open for the serving of customers" resulted from an Appeal to the High Court in the case of *Betta Cars Ltd., v. Ilford Corporation*. The Company were convicted and fined for keeping a showroom open for display purposes only. The Lord Chief Justice said—"It seems to me here that where a shop is open to allow people to come in and view goods which are for sale which have the prices upon them and the terms upon which business will be done and an employee there presumably to answer questions and see that the public do not damage the vehicles, to say that in those circumstances the shop is closed for the serving of customers seems to run counter to all common sense". At the time of the offence, no customer was seen to approach the shop nor was there any evidence that any sale to a customer had taken place.

The Western Counties Divisional Secretary of the Motor Agents Association, after consultations with the Inspectorate, circulated this decision to all his members and this was followed up by an inspector visiting all motor traders in Bristol who advertised that they were open for viewing on Sundays.

One prosecution in respect of Sunday trading and four in respect of the hours worked by shop assistants and failure to maintain records resulted in five traders paying a total of £42 4s. Od. in fines and costs.

The Health Committee considered five applications for exemption from the general closing hours in respect of exhibitions; four were granted and one, The Bristol Ideal Homes Exhibition, 1960, refused. Those granted were:—

- (1) The Bristol Aquarists' Society
- (2) The Bristol Budgerigar and Foreign Bird Society
- (3) The Bristol Flower Show
- (4) The Bristol Ideal Homes Exhibition, 1961

A member of the Health Committee was to have been accompanied by one of the shops inspectors at the Annual Conference of the Institute of Shops Acts Administration at Morecambe but owing to his resignation from the Council shortly before the Conference was due to be held, the Inspector went alone.

At the request of the Union of Shop Distributive and Allied Workers' Organiser an inspector gave a talk on the *Shops Act* at a general meeting of the managers of Boot and Shoe Shops.

*Other Enactments*(a) *Young Persons (Employment) Act, 1938*

This Act, which controls the working hours of a number of young persons outside the scope of previous legislation, involves visits to various transport undertakings and this year rather more infringements were noted than in recent years. In all cases the employers adjusted the hours to comply at the request of the inspectors without further action being necessary.

(b) *Sunday Entertainment Act, 1932*

There are now 18 cinemas open for Sunday performances, one more having closed down during the year. At one cinema it was found that staff had been employed contrary to the requirements of the Act. The facts were reported to the Clerk to the Licensing Justices, who in view of all the circumstances, dealt with the matter by the issue of a written warning.

(c) *Employment of Women, Young Persons and Children Act, 1920*

No infringements were reported under this Act.

**Shops Act, 1950**

<i>1959</i>					<i>1960</i>
5,678	<i>Visits—Retail</i>	..	..	..	5,644
314	Wholesale	..	..	..	114
1,181	<i>Revisits — Retail</i>	..	..	..	1,313
55	Wholesale	..	..	..	20
876	<i>Infringements — Failure to exhibit notices</i>	..			998
54	Closing hours	..	..		35
30	Sunday employment	..			30
29	Half holiday	..	..		42
18	Hours of young persons	..			24
36	Meal intervals	..	..		58
20	Seats for female assistants..				23
1,046	<i>Verbal Warnings</i>	..	..	..	1,207
8	<i>Warning Letters</i>	..	..	..	1
6	<i>Legal Proceedings</i>	..	..	..	5
	<i>Assistants' Facilities—Section 38</i>				
58	(a) Improved	..	..	..	77
93	(b) Referred to Public Health Inspectors				86

**Employment of Women, Young Persons  
and Children Act, 1920**

6	<i>Visits</i>	..	..	..	..	3
—	<i>Revisits</i>	..	..	..	..	1
—	<i>Infringements — Records</i>	..	..	..	..	—
—	Night employment					—
—	<i>Verbal Warnings</i>	..	..	..	..	—
—	<i>Written Warnings</i>	..	..	..	..	—
—	<i>Legal Proceedings</i>	..	..	..	..	—

**Sunday Entertainment Act—Cinemas**

<i>1959</i>						<i>1960</i>
57	<i>Visits</i>	..	..	..	..	53
1	<i>Revisits</i>	..	..	..	..	6
—	<i>Infringements</i> — Holidays	..	..	..	..	1
1	Records	..	..	..	..	3
1	<i>Verbal Warnings</i>	..	..	..	..	2
—	<i>Reported to Licensing Justices</i>	..	..	..	..	1
—	<i>Legal Proceedings</i>	..	..	..	..	—

**Young Persons (Employment) Act, 1938**

41	<i>Visits</i>	..	..	..	..	71
3	<i>Revisits</i>	..	..	..	..	9
1	<i>Infringements</i> — Notices	..	..	..	..	2
—	Sunday employment	..	..	..	..	—
—	Half holidays	..	..	..	..	3
—	Hours	..	..	..	..	1
1	Meal intervals	..	..	..	..	3
—	Night employment	..	..	..	..	1
1	<i>Verbal Warnings</i>	..	..	..	..	10
—	<i>Warning Letters</i>	..	..	..	..	—
—	<i>Legal Proceedings</i>	..	..	..	..	—

*Time Worked Outside of Office Hours and Observation Patrols*(a) *Shops Inspectors*—

					<i>1960</i>
22 hrs. 20 mins.	<i>Evenings</i>	..	..	..	29 hrs. 30 mins.
61 hrs. 45 mins.	<i>Sundays</i>	..	..	..	52 hrs. 25 mins.
180 hrs. 50 mins.	<i>Wednesdays (p.m.)</i>	..	..	..	199 hrs. 25 mins.
4 hrs.	<i>Saturdays (p.m.)</i>	..	..	..	3 hrs. 10 mins.

(b) *Assistants*—

17 hrs. 15 mins.	<i>Evenings</i>	..	..	..	—
—	<i>Sundays</i>	..	..	..	—
65 hrs.	<i>Wednesdays (p.m.)</i>	..	..	..	—
—	<i>Saturdays (p.m.)</i>	..	..	..	—

### *Shops Act Environmental Health Aspects*

The control of sanitary and other arrangements in shops has again received a good measure of attention. The working environment of shop employees is reflected in their health and efficiency and the standards of lighting, ventilation, comfort, sanitary accommodation and the provision of suitable and sufficient hand-washing facilities are all important environmental factors to which particular attention is paid on inspections. Both the *Shops Act* and Food Hygiene Regulations have factors in common so that on many occasions visits are dual purpose in character. Since the Chief Public Health Inspector is also the Chief Shops Inspector, close liaison exists between the officers concerned with "conditions of employment" and the public health inspectors, and an arrangement exists whereby the Shops Inspectors, following routine work at premises, notify the district public health inspectors of any apparent contravention of the *Shops Act*.

The progressive development of the Broadmead shopping area, in particular, has again called for careful examination of plans for new premises and every care is taken at this stage, by discussion and correspondence with proposers and architects to ensure compliance with the requirements of the *Shops Act, 1950*.

During the year a total of 3,657 visits and revisits were made by Public health inspectors to registrable and non-registrable food shops and to other shops.

# THE REPORT OF THE SCIENTIFIC ADVISER AND OFFICIAL AGRICULTURAL ANALYST FOR THE CITY AND COUNTY OF BRISTOL FOR THE YEAR 1960

(Incorporating the Work on behalf of the County of Gloucester and the City of Gloucester)

E. G. Whittle, B.Sc. (London), F.R.I.C.

## STAFF FOR THE YEAR

<i>Scientific Adviser</i>	..	E. G. Whittle, B.Sc. (Lond.), F.R.I.C.
<i>Deputy Scientific Adviser</i>	..	I. Dembrey, B.Sc. (Bristol), F.R.I.C.
<i>Principal Assistant</i>	..	G. G. Fisher, B.Sc. (Birm.), F.R.I.C.
<i>Principal Assistant</i>	..	D. J. Taylor, B.Sc. (Lond.), F.R.I.C.
<i>Assistant Analyst</i>	..	Miss M. V. Westcott, M.Sc. (Bristol).
<i>Assistant Analyst</i>	..	Mrs. A. Jones, B.Sc. (Dublin), A.R.I.C.
<i>Assistant Spectroscopists</i>	..	Miss J. Ayerst, B.Sc. (Bristol). Mrs. P. M. Isaac, B.Sc. (Birmingham).
<i>Field Officer</i>	..	R. C. M. Putnam, M.I.P.H.E.
<i>Chief Technician</i>	..	C. R. Turner
<i>Technicians</i>	..	Mrs. J. Withers G. P. Hall
<i>Junior Technicians</i>	..	Miss V. Bromwich B. L. Bullock Miss H. Ninnis
<i>Student Technicians</i>	..	D. Morgan Miss A. Chippett P. C. Cox
<i>Secretary</i>	..	Mrs. I. Hall
<i>Assistant Secretary</i>	..	Miss S. J. Kirby
<i>Laboratory Attendants</i>	..	Mrs. N. Budd Mrs. K. Comber (part-time)
<i>Research Assistant</i>	..	To be appointed.

## INTRODUCTION

January 1st 1960 was the date on which the Department returned to full Corporation control after 25 years of close association with the University of Bristol as the Chemical Section of the Preventive Medicine Department. This Report is therefore the first to be made on the year's working in much closer association with the Health Department. The year has been a successful one in many ways. In volume of work the 10,000 mark has been exceeded for the second year running and it now appears that we can expect a steady 2,500 samples each quarter with slight rises in the winter and autumn quarters and falls in spring and summer.

Considering the City examinations, the total was over 8,000 which is now 5 to 1 in relation to Gloucester County which can be compared with a 3 to 1 ratio pertaining in 1951 when work for the County began. In other words in nine years the work for the City has increased from some 4,000 to over 8,000—a remarkable increase indicative of the ever growing value of the work and the increasing legislation.

On the purely domestic front I have to record that certain staff changes have occurred. Mrs. J. K. Noyes left early in the year and was succeeded by Mrs. P. M. Isaac whilst among the Student Technicians Mrs. M. Humphreys, B. L. Bullock and M. A. Wagner all left. Bullock and Wagner secured other appointments, the former at Berkeley Power Station Laboratories and the latter with the Ministry of Agriculture, Fisheries and Food. Both Mrs. Noyes and Mrs. Humphreys left a few months before the arrival of babies, and we congratulate them both on the birth of their sons. Miss A. Chippett and P. C. Cox joined the staff and we have yet to appoint one Student Technician.

It is a matter of regret that it has not been possible to secure the services of a Research Assistant and it seems probable now that the type of individual we have in mind is not likely to be persuaded at the salary that can be offered.

Mrs. A. Jones, one of our Assistant Analysts, was successful in obtaining the Associateship of the Royal Institute of Chemistry in November and Miss H. Nennes was able to satisfy the conditions for promotion and was upgraded to the Technician status.

It will be recalled that this laboratory has dealt with the analytical work for Gloucester County since 1951 and since that time we have come to value the great interest and experience shown by the Chief Inspector of Weights and Measures in whom was vested the Food & Drug control. It was, therefore, a great shock to learn of the sudden death of Mr. T. A. Bramley in November. Mr. Bramley was not only an experienced officer but it can be truly said that he was a gentleman.

Professor Garner, a very good friend of the Department, particularly during the University regime, died earlier in the year. In recent years we had close contact with him on Civil Defence affairs. Professor Garner was the Regional Scientific Adviser on Civil Defence and we met on many occasions with reference to the Scientific Intelligence Officer's activities.

It is also with regret that I record the death of another senior officer of this City. Our direct contact with Mr. Kirkup, the Chief Fire Officer, was primarily through the section of the Fire Brigade now responsible for enforcement of the Petroleum Regulations. Mr. Kirkup died in April.

Finally I wish to take this opportunity of expressing my appreciation of the co-operation and valuable help given by all members of the staff, and I thank the sampling officers of the City, and the County and City of Gloucester for their willing help and their kindness and consideration throughout yet another busy year.

The Report is divided in the usual fashion into the Introduction and eleven parts as under:—

Part I	Food and Drugs Act
Part II	Fertilisers and Feeding Stuffs Act
Part III	Waters, Swimming Bath Samples, Effluents, Sewage and Chlorination
Part IV	Rag Flock Act
Part V	Pharmacy and Poisons Act
Part VI	Miscellaneous Analyses
Part VII	The County of Gloucester Report
Part VIII	The City of Gloucester Report
Part IX	Atmospheric Pollution
Part X	Spectroscopy
Part XI	Other Activities

**Table I—Summary of Samples examined during the year ended  
31st December 1960, for the City and County of Bristol,  
the County of Gloucester, and the City of Gloucester**

		Bristol	Gloucester County	Gloucester City
Milk	.. .. ..	902	735	18
Food and drugs	.. .. ..	3,214	531	38
Waters and swimming baths	.. .. ..	235	97	5
Fertilisers and feeding stuffs	.. .. ..	305	72	6
Miscellaneous	.. .. ..	504	41	—
Port Health Office samples	.. .. ..	714	—	—
		<u>5,874</u>	<u>1,476</u>	<u>67</u>
Rag Flock Act	.. .. ..	35	—	—
District Health Inspectors' samples	.. .. ..	23	—	—
Pharmacy and Poisons Act	.. .. ..	51	—	—
Atmospheric Pollution—				
Lead peroxide	.. .. ..	90	75	24
Deposit gauges	.. .. ..	64	74	24
Zinc and Fluorine	.. .. ..	23	—	—
Smoke recordings, City	.. .. ..	221	—	—
" " Port Authority	.. .. ..	642	—	—
Spectrophotometric analyses	.. .. ..	953	31	1
Chlorination	.. .. ..	215	31	—
Vitamin B <sub>12</sub> assays	.. .. ..	43	—	—
		<u>2,360</u>	<u>211</u>	<u>49</u>
Total	.. .. ..	<u>8,234</u>	<u>1,687</u>	<u>116</u>
			Grand Total 10,037	

## PART I. FOOD AND DRUGS ACT

### New Legislation, Reports and Recommendations

#### Statutory Instruments 1960 No. 398—The Agriculture (Poisonous Substances) (Extension Order.)

This order which applies to great Britain now includes in the *Agriculture (Poisonous Substances) Act 1952*, with subsequent Regulations, substances the molecular structure of which consists of a bridged six membered ring with substituents in the ring together with organo-mercury compounds, arsenical compounds and fluoracetic acid and its derivatives. The Minister of Agriculture, Fisheries and Food and the Secretary of State for Scotland are satisfied that the use of these compounds in agriculture involves substantial risk of poisoning to agricultural workers.

The Ministry of Agriculture, Fisheries & Food also issued a scheme agreed between the Government and Industry on the *Notification of Pesticides*. The scheme of notification was evolved in a voluntary basis by negotiation between Government Departments and the Industrial Associations concerned and is intended to provide only for the safe use of chemicals and is not concerned with approval of claims for biological uses.

#### Statutory Instruments 1960 No. 698—The Poisons Lists Order

The order makes some additions to the Poisons List. In particular the order brings under control certain tranquillisng compounds which previously were far too freely available. Typical of these are acetylcarbromal, azacyclonol, benactyzine, bromvaletone, carbromal, (Relaxa tablets etc.) mephenesin, meprobamate and methocarbamol.

#### Statutory Instruments 1960 No. 699—The Poisons Rules

These Rules consolidate with amendments the Rules specified in Rule 35 (1). The principal amendments are as follows. By reason of amendments to Rules 5 and 12 the requirements of Rule 12 (3) as to the form of prescription and of Rule 5 as to labelling are relaxed as respects certain poisons previously included in the Fourth Schedule (which sets out the poisons which may be sold by retail only upon prescription) and these poisons are now set out in a separate part of the Schedule, Part B, which includes also other poisons among which are certain poisons added to the Poisons List by the Poisons List Order, 1960. The requirements of Section 19 (3) of the *Pharmacy and Poisons Act, 1933* (which requires particulars of medicines supplied or dispensed under that Section to be entered in a book) are relaxed by Rule 8 in the case of certain prescriptions given by a registered dentist. The provision of Rule 7 (3) (c) of the Poisons Rules, 1952, requiring that an article to which Rule 7 (3) applies which is sent by post should be sent by registered post, is omitted. Rule 16 is amended so that a certificate authorising the purchase of monofluoroacetic acid or its salts is required to state the quantity authorised to be purchased and so that the seller is required to retain the certificate. Rule 22 (3) (which provides that where a poison other than a poison included in the First Schedule is sold in the container and outer covering in which it was obtained by the seller the name and address of the seller need appear only on the outer covering) is now extended to all poisons. There is added to the Seventh Schedule a new paragraph, paragraph 9, requiring the labelling of certain medicines for the prevention of motion sickness. Certain insertions have been made in the First and Fourth Schedules in order to impose appropriate restrictions in respect of the poisons added to the Poisons List by the Poisons List Order, 1960. Certain other changes have been made in the lists of substances in respect of which restrictions

or requirements are imposed by virtue of the various Schedules, and account has been taken of changes of nomenclature and classification.

#### *Radioactive Substances Act 1960*

Described as an Act to regulate the keeping and use of radioactive material and to make provision as to the disposal and accumulation of radioactive waste and for purposes connected with matters aforesaid. The Act deals with such details as—

- (a) General provisions for registration of users of radioactive material
- (b) Exemptions
- (c) Registration of mobile radioactive apparatus
- (d) Disposal of radioactive waste
- (e) Provisions as to functions of public and local authorities
- (f) Rights of entry and inspection, and many other matters.

In addition dealing with the meaning of radioactive material, certain elements are specified and include actinium, lead, polonium, protoactinium, radium, radon, thorium and uranium, together with any substance possessing radioactivity which is wholly or partly attributable to a process of nuclear fission or other process involving bombardment by neutrons or ionising radiations.

#### *Statutory Instrument 1960 No. 1542—The Milk (Special Designations) Regulations*

These Regulations replace and consolidate with amendments, the Milk (Special Designation) (Raw Milk) Regulations 1949 to 1954 and the Milk Special Designation (Pasteurised and Sterilised Milk) Regulations 1949 to 1953.

#### *Statutory Instrument 1960 No. 1165—The Fertilisers & Feeding Stuffs Regulations*

These Regulations consolidate, with amendments, the Regulations made in 1955 and 1956 under the *Fertilisers and Feeding Stuffs Act, 1926*.

The Regulations prescribe the manner of marking parcels of fertilisers and feeding stuffs intended for sale, and the forms of registers to be kept by certain persons dealing with fertilisers and feeding stuffs. The five schedules to the Act are varied by the substitution of five schedules, similarly numbered, which appear in the First to the Fifth Schedules to the Regulations. The manner in which samples are to be taken for analysis is described in the Sixth Schedule. The Seventh and Eighth Schedules prescribe the methods in which analyses are to be undertaken. The Ninth Schedule sets out the limits of variation, or permitted tolerances, in the particulars given by a seller of the amounts of the ingredients of a fertiliser or feeding stuff. The Tenth and Eleventh Schedules respectively prescribe forms of certificates of analysis and of returns by local authorities.

The principal changes comprise the revision of the methods of analysis of fertilisers and feeding stuffs and alterations in the forms of certificate of analysis.

Of particular interest to the Analyst are the 7th and 8th Schedules which deal with Methods of Analysis. Changes introduced include the following:

##### *For Fertilisers*

1. For granular fertilisers a No. 60 sieve is now specified.
2. Kjeldahl process digestion is to be continued 2 hours after clearing and not 1 hour. A mercury catalyst is now compulsory and sodium thiosulphate (not sulphide) is to be added to the distillation flask.

The Devarda alloy reduction method is now prescribed whether chlorides are present or not.

3. For phosphoric acid the vanado-molybdate method is now official. The Unicam SP.600 is a most suitable instrument for the technique involved.
4. The perchloric acid and chloroplatinate methods are retained but the flame photometer may be used for fertilisers with not more than 20 per cent of potash.
5. Screened methyl red replaces methyl orange for free acid in ammonium sulphate.

*For Feeding Stuffs*

1. The oil figure now means the extract obtained by applying the official method. There is an interesting modification for samples containing full cream dried milk involving a moisture adjustment and a note on re-extraction where the oil exceeds 10 per cent.
2. Protein and phosphoric acid determinations follow the lines for fertilisers.
3. The fibre determination remains as before with only minor modifications. The acid and alkali strengths are the same but look different being now expressed in terms of normality.
4. Sugar determinations are now to be carried out by the Lane and Eynon methylene blue method.
5. For salt the sample is now ignited with lime and not sodium carbonate.

*Statutory Instrument 1960 No. 2261—Arsenic in Food (Amendment) Regulations*

These regulations increase from 2·0 to 5·0 parts per million, the maximum amount of arsenic permitted in brewer's yeast intended for use by manufacturers in the manufacture of yeast products. The final yeast product sold to the public must still contain not more than 2·0 p.p.m. calculated on the dry matter. The reason for the relaxation in brewer's yeast is that during fermentation yeast removes arsenic and other trace metals from beer.

*Statutory Instrument 1960 No. 2331—The Skimmed Milk with Non-Milk Fat Regulations*

This is a somewhat belated piece of legislation and even now does not become operative until 19th September, 1961.

These regulations, which apply to England and Wales only—

- (a) impose requirements as to the labelling and advertising of certain "specified foods" which have the appearance of milk, condensed milk or dried milk and which contain skimmed milk and non-milk fat (Regulations 3 and 5 (1) and the First Schedule), but exempt the foods named in Part I of the Second Schedule from the requirement to bear on the label the declaration "Unfit for babies" (or the permitted alternatives) provided that the composition of the food is as prescribed in Part II of that Schedule;
- (b) prohibit (subject to certain savings) the labelling or advertising of the *specified foods and beverages containing skimmed milk*, in a manner suggestive of milk or anything connected with the dairy interest (Regulations 4 and 5 (2); and
- (c) provide that the Condensed Milk Regulations, 1959, and the Public Health (Dried Milk) Regulations, 1923 to 1948, shall not apply to any specified food (Regulation 8).

*Food Standards Committee Report—Bread and Flour Report, published 17th November 1960*

This Report makes recommendations for the control over composition, description, labelling and advertising of bread and flour. The report takes

into account evidence received from the food industry and other interests including those concerned with the enforcement of food and drugs legislation.

The main recommendations concerning *bread* are—

1. There should be a statutory permitted list of the ingredients which may be used in bread.
2. That descriptions of "protein" breads should be controlled.
3. That slimming claims in connection with bread should be controlled.
4. That exaggerated claims for enrichment of bread or for energy-producing qualities should be prohibited.

Concerning *flour* the Committee recommends that—

1. The present Regulations which require all flour to contain specified amounts of Vitamin B<sub>1</sub>, nicotinic acid and iron and the addition of chalk (*creta preparata*) to all flour except whole meal flour, should be continued for the present.
2. That the sampling of flour to ensure that it complies with these regulations should be confined to *docks and mills*.
3. That only certain bleaching and improving agents should be allowed for the treatment of flour.

The Report does not commit Ministers and before deciding whether and to what extent the recommendations should be implemented, full consideration will be given to any representations by interested parties. Such representations must be made by 17th February 1961.

#### *Interdepartmental Committee Report—Milk Composition in the United Kingdom*

This Report known as the Cook Report was presented to Parliament by the Secretary of State for the Home Department, the Secretary of State for Scotland, the Minister of Agriculture, Fisheries and Food, and the Minister of Health in September 1960.

This most important document running to ninety odd pages is most difficult to summarise in a concise manner, but it is helpful perhaps to outline the Committee's approach to the problem.

Part I of the Report in four sections deals with—

- Section 1 Historical background
- Section 2 Milk and nutrition
- Section 3 National trends in milk composition
- Section 4 Milk composition and the individual herd

Part II Proposals for the future.

- Section 5 The broad objective
- Section 6 Legal standards
- Section 7 Marketing standards
- Section 8 Other changes

Followed by Conclusions and a Summary of Recommendations. There are three Panel Reports—

- (1) Report of the Medical Panel
- (2) Report of the Animal Husbandry Panel
- (3) Report of the Hortvet Panel

and three appendices relating to the list of witness, the Sale of Milk Regulations 1939 and existing schemes to improve milk composition.

The general tenor of the Report is excellent and the underlying principle that every effort must be made to stop the decline in the compositional standard of milk is welcomed.

Equally acceptable is the shift of emphasis from fat to solids-not-fat as the criterion of quality. One recommendation suggests a penalty scheme for poor milks but in some quarters there is the feeling that some bonus scheme for good quality milk would be more acceptable although more difficult to operate.

The main points on page 36 to 38 embody no less than 23 recommendations and it is felt that of these items (ii) and (viii) must stand or fall together. If legal difficulties are to be avoided it would also appear vital that the abolition of presumptive standards should coincide with the composition of absolute standards. Similarly the abolition of presumptive standards should also coincide with the adoption of the Hortvet test as legal proof of the presence of added water. In this connection it will be essential to find a suitable preservative for milk samples.

One final point should be stressed. In view of the unsatisfactory nature of the present definition of Milk in the *Food and Drugs Act* there is urgent need of a new legal definition of milk. The suggested definition by the Cook Committee has the merit of simplicity and conciseness and might be difficult to better. It is:—

“Cow's milk means the secretion, excluding colostrum, which can be gained by normal milking methods from the lactating mammary gland of the healthy, normally fed cow.”

#### *The Weights and Measures Bill*

Finally mention should be made of the Weights & Measures Bill to replace existing legislation. The yard, metre, pound and kilogram continue to be the basic units in the United Kingdom but the yard and pound are defined by reference to the metre and kilogram instead of by reference to Imperial standards.

The Third Schedule of the Bill lists the weights and measures lawful for use for trade. It is interesting to note that the rod, pole and perch will disappear and this must surely be a matter of rejoicing among school children if it also implies the disappearance of the many problems of conversion to and from these awkward units.

The Bill proposes also to tidy up one of the housewife's real bones of contention in that many miscellaneous prepacked foods and cleaning materials etc. will have to be sold by or marked with net weight and will be prepacked only in fixed quantities. Among other things this will prevent the pernicious growth of an advertising technique in Giant packs etc. where the giant refers to the size of the package and not the contents.

There is much also of great value and interest in the Bill but which is outside the scope of the report.

**Table 2—Percentage Adulteration over 7 years (Bristol Only)**

	1954	1955	1956	1957	1958	1959	1960
Total number of samples	2,750	3,179	3,012	4,868	3,917	4,028	4,116
Milks per cent adulterated	8·58	5·52	8·48	6·0	5·64	13·61	
Milk—ordinary	—	—	—	—	—	—	1·94
Milk—Channel Islands	—	—	—	—	—	—	17·9
Foods	0·36	0·35	0·36	0·33	0·34	0·76	1·16
Drugs	2·42	0·77	2·99	1·2	1·8	1·36	2·85
Total	2·65	1·26	2·81	2·0	1·87	4·29	3·06

The milk adulteration data reveals a most disquieting feature. Whilst the adulteration rate of ordinary milk is of low order it comes as a disagreeable surprise to note the high adulteration rate of Channel Island milk. Over 350 samples were examined and nearly 18 per cent were found to be deficient in fat

i.e. they contained less than the absolute standard of 4 per cent required for this class of milk. This is a sad reflection on allegedly quality milk. It can be added of 318 genuine milks that the average quality at 4·7 per cent of fat and 9·0 per cent solids-not-fat is a much more presentable picture.

**Table 3—Average Composition of Genuine Milks for 1960**

**Bristol—Ordinary Milks**

Month		No. of samples	Fat % average	Non-Fatty solids % average
January	..	71	3·52	8·57
February	..	44	3·43	8·65
March	..	43	3·37	8·71
April	..	29	3·41	8·76
May	..	59	3·37	8·88
June	..	41	3·48	8·72
July	..	28	3·17	8·73
August	..	34	3·46	8·71
September	..	33	3·51	8·79
October	..	27	3·56	8·72
November	..	63	3·92	9·08
December	..	32	3·81	8·69
	Total	504	3·50	8·75

**Bristol—Channel Island Milks**

January	..	25	4·66	9·09
February	..	11	4·86	8·83
March	..	45	4·40	8·79
April	..	23	4·69	9·13
May	..	26	4·41	9·06
June	..	12	4·35	8·82
July	..	28	4·63	8·86
August	..	25	4·88	9·03
September	..	29	4·95	9·11
October	..	21	4·73	9·27
November	..	39	4·92	8·76
December	..	34	4·90	9·10
	Total	318	4·70	8·99

**Gloucester County—Ordinary Milks**

January	..	39	3·74	8·61
February	..	74	3·69	8·65
March	..	42	3·50	8·62
April	..	47	3·40	8·46
May	..	52	3·24	8·78
June	..	49	3·62	8·73
July	..	43	3·64	8·77
August	..	20	3·67	8·72
September	..	73	3·53	8·68
October	..	38	3·81	8·73
November	..	51	3·87	8·72
December	..	27	3·80	8·68
	Total	555	3·63	8·68

**Gloucester County—Channel Island Milks**

<i>Month</i>		<i>No. of samples</i>	<i>Fat % average</i>	<i>Non-fatty solids % average</i>
January	..	.. ..	17	4·43
February	..	.. ..	15	4·36
March	..	.. ..	3	4·33
April	..	.. ..	4	4·18
May	..	.. ..	6	4·18
June	..	.. ..	18	4·41
July	..	.. ..	6	4·55
August	..	.. ..	7	4·77
September	..	.. ..	18	4·71
October	..	.. ..	16	4·97
November	..	.. ..	6	4·60
December	..	.. ..	16	4·55
	Total	132	4·50	8·96

**Gloucester City—Ordinary Milks**

March	..	.. ..	2	3·13	8·84
April	..	.. ..	11	2·81	8·40
August	..	.. ..	2	3·40	8·52
	Total	15	3·11	8·59	

**Gloucester City—Channel Island Milks**

March	..	.. ..	1	3·48	9·00
August	..	.. ..	1	4·40	9·10
	Total	2	3·94	9·05	

The action taken on milk samples found adulterated varied with the circumstances. Thus in several instances of informal milks, follow-up samples were found satisfactory. Again several fat deficient milks when bulked within a consignment were found to produce a satisfactory bulk fat. In other cases warning letters were sent to producers. In no case did the Town Clerk's Department suggest recourse to prosecution.

Of other food and drugs found to be irregular in some aspect the following may be briefly noted:—

Several samples of corned beef contained excess of lead ranging from 7 to 15 p.p.m. Some of the meat was returned to suppliers whilst in another case the brand was out of stock.

A condensed Tomato Rice Soup also contained excess lead but repeat samples were satisfactory.

Ten samples of Ammoniated Tincture of Quinine were all deficient in ammonia. The worst deficiencies being 64, 81 and 72 per cent. Two of the samples besides ammonia deficiencies were respectively 95 per cent deficient in quinine and 8 per cent in excess of quinine. For the most part these samples represented old stocks which were destroyed. New stocks were found satisfactory. An Indian Chicken Curry was quite devoid of chicken but a repeat sample was satisfactory. Italian apples contained excess of both lead and arsenic.

Formal samples of butter contained excess moisture and the wholesalers received warning letters.

Soda water samples were found to be practically devoid of sodium bicarbonate and subsequent investigations at the local bottling plant indicated the likelihood that bicarbonate was indeed never added. The bottlers were warned.

Essence of Rennet was found to contain 2,500 p.p.m. of boric acid and 350 p.p.m. of benzoic acid. Both additions are a contravention of the Preservative Regulations. An undiluted Cheese Rennet was found to contain 13,700 p.p.m. of boric acid and 4,200 p.p.m. of benzoic acid. It appeared that the Rennet was intended for cheese manufacture and should not have been sold retail. Follow up investigations indicated that cheese prepared from this Rennet did not, in fact, contain either preservative.

Five samples of bread sold as milk bread were found to contain no lactose. The several vendors were warned that assistants must be informed that ordinary bread must not be "palmed off" as milk bread.

Four samples of Luncheon Meat were found to contain excess of tin ranging from 350 to 800 p.p.m. The remaining stocks were surrendered for destruction.

Two samples of marzipan and two of almond paste were found to be from 24 to 40 per cent deficient in ground almonds. The local manufacturers working for the Christmas trade were warned that 25 per cent of ground almonds in such products would be expected in future.

Various drug preparations were deficient in active constituents and proved to be largely old stocks which were readily destroyed or surrendered by retailers. Follow up samples of new stocks were satisfactory.

## PART II. FERTILISERS AND FEEDING STUFFS ACT

Table 4—Summary of Samples Examined

			Formal	Informal	Comment or Irregularity
Bristol—					
Feeding Stuffs	..	..	18	9	4
Fertilisers	..	..	31	98	37
Avonmouth					
Feeding Stuffs	..	..	149	—	16
			198	107	57

Of the 16 feeding stuffs from Avonmouth, 5 samples had an excess of fibre, 5 contained excess of oil, 2 contained excess of protein, one sample was deficient in oil and protein, one deficient in oil only, one deficient in protein only, and one with slight excesses of oil and protein.

The City samples of which 41 required comment on irregularities, some admittedly for minor infringements, were largely dealt with by letters and copies of the certificate to retailers or manufacturers.

There was a slight increase in sampling rate of fertilisers and animal feeding stuffs over the year.

The principle item of interest, however, during the year was the introduction of new regulations made under the Act, namely the Fertiliser & Feeding Stuffs Regulations 1960, which came into operation on the 1st October 1960. The main change was the revision of methods of analysis, which up to then had been somewhat tedious and long in view of modern analytical techniques. The

introduction of such methods as spectrophotometry and flame photometry has brought the analysis of fertilisers and feeding stuffs into line with modern food analysis, and as a result the whole organisation has been standardised, enabling the analyst to perform far more determinations with increasing accuracy.

### PART III. WATER AND SEWAGE ANALYSES

**Table 5—Bristol**

City water from tap at Canyng Hall .. .. .. ..	26
City water from pumping station, Knowle .. .. .. ..	12
Downend Home and Frenchay Hospital .. .. .. ..	22
Seepage, sewage effluents and streams .. .. .. ..	25
Ships in port .. .. .. ..	2
Council House (heating system) .. .. .. ..	30
Swimming Baths .. .. .. ..	111
Miscellaneous .. .. .. ..	7
	235

All the samples of potable water were satisfactory as the result of chemical examination. There was only a trace of dissolved oxygen in samples of water from the Council House heating system, and the sulphite content ranged from nil to 30·5 parts per million.

**Table 6**

No. of samples	<i>Bristol Waterworks Supply</i>		<i>West Gloucester Division</i>	<i>Tap at Frenchay Hospital</i>
	<i>Tap at Canyng Hall</i>	<i>Tap at Jubilee Road</i>	<i>Tap at Downend Homes</i>	
<i>Range of variation (parts per million)</i>				
Total solids ..	154-315	131-149	133-404	158-401
Chlorine as Chloride ..	11-16	10-16	14-44	15-44
Nitrate Nitrogen ..	0.53-2.15	0.32-2.11	0.50-1.52	0.30-1.58
Total hardness ..	164-246	74-100	78-236	130-236
Permanent hardness	32-60	38-58	31-60	35-49

These samples from the mains were taken throughout the year at the points indicated above. The wide variation in the figures of analysis is due to admixture of water from different sources of supply.

**Table 7—Gloucester (County)**

Mains supplies (Public and Private) .. .. .. ..	18
Wells, Boreholes, Springs, etc. .. .. .. ..	29
Streams .. .. .. ..	10
Seepage .. .. .. ..	1
Sewage and Trade effluents .. .. .. ..	16
Swimming Pools and Baths .. .. .. ..	23
	97

Forty-seven samples of drinking water were examined. Thirty-eight were satisfactory, the remainder possessed undesirable features from a chemical point of view.

**Table 8—Gloucester (City)**

Mains supply	..	..	..	..	..	..	..	3
Seepage	..	..	..	..	..	..	..	2
								— 5

The three samples of drinking water were satisfactory chemically.

#### *Report of the Field Officer*

##### *General*

There has been a considerable increase in field activities during recent years. To the single major responsibility of sewage chlorination has been added a variety of duties. These are mainly requests for help with problems of a chemical or technical nature, and come from several departments of the Corporation and also from Gloucester County.

The officer attended a two week's intensive course on river pollution, sewage and trade waste treatment at Birmingham University, and also the Public Works Congress in London. Great appreciation is expressed for the permission readily granted to attend these gatherings. It is only by such visits and by the reading of much technical literature that one can bring early experience up to date and still "see the wood for the trees."

##### *Sewage Chlorination*

Last year's successful river treatment at Bedminster Bridge suggested the need for active dosing by the new Cattle Market Road plant early in the season. However, before the equipment there became operational the weather had broken, and so the builders were transferred to more urgent work elsewhere. In spite of the weather in July and August, there were several days on which a good dose of chlorine would have improved conditions in the Temple Meads and St. Philips area.

At this river treatment station a new type of chlorine vaporiser has been installed which incorporates much improved safety and alarm equipment. It is hoped in the near future to purchase the single high capacity chlorinator designed to work in conjunction with this vaporiser. The complete installation will then be efficient and flexible, affording the best possible protection against leakage and other hazards. The telephones at this station and Ashton, also those in the homes of the Officer and Chief Chlorination Plant Operator, have been placed on the Emergency List by the Telephone Manager. This service, which is taken very seriously by the telephone service and for which there is no charge, has already proved of great value. On one occasion, when the wires were brought down by a crane, repairs were completed in two hours.

Four men attached to the Works Department under the City Engineer are employed throughout the year as a chlorination team, working under the direct supervision of the Officer. To cover the spread of hours and extra duties when plant is operational, roughly May to October, extra men are assigned to the team, but there is a desperate shortage of suitable candidates. Even in a summer as poor as 1960, the hours are long although there is not much strenuous work. The Works Department Manager and the Officer have an informal agreement to try out any man irrespective of age or strength who seems to have reliability and plain horse sense in fair measure. A man in his 50's who can use a telephone and can be made to realise that "The price of *survival* is eternal vigilance" is usually satisfactory provided he does not get too enthusiastic and become a danger to himself and the public at large. A slight physical weakness may be an advantage as the building foreman is then more willing to release him!

Much of the transport difficulty has been overcome by the willingness of the Transport and Cleansing Department to supply a "Van, with driver, 24 hours per day, 7 days per week", throughout the busy season but the problem of finding enough men who are competent to control any chlorine hazard seems unlikely to be solved in the foreseeable future.

#### *Other Chlorination Duties*

The chlorination team also deal regularly with the handling, separation, and disposal of some thousands of gallons per week of cutting oil and degreasing fluid from engineers. Occasional loads of cyanide, chromic acid etc. are also handled by the team under the direct supervision of the Officer.

A small capacity chlorination station, treating the effluent from Stockwood Refuse Tip has been operating throughout the year. A satisfactory method of lime treatment has been devised, producing a final effluent acceptable to the Avon River Board. The liming and pumping is now carried out by the Cleansing Department, but the chlorination process is under the direct control of the Officer.

Emergency treatment of sewage for de-gassing, sewer flushing, ventilation, lighting and gas testing is frequently undertaken, and the service is available at any hour of the day or night.

#### *Other Field work, Bristol*

The officer, under the Scientific Adviser, is directly responsible for the regular sterilising of water in the childrens' paddling pools at Blaise Castle, St. Andrews Park and Arnos Court, and also for the unofficial paddling pool in Victoria Rooms Fountains.

The heating services in the Council House are checked for corrosion or other trouble.

It is hoped soon to make an organised start on the long term survey of the River Severn, requested by the Haven Master. This has been held up by the non availability of new type apparatus, and of the difficulty in obtaining suitable parts from which to make it.

A number of calls has arisen, mostly from the Engineer's or Health Departments, for detection of difficult toxic gases. Three of these were in private houses, and in total, many hours were spent when we "called about the smell on the landing." Where appropriate action could be taken, members of the chlorination team did the work with a minimum of upheaval in the homes concerned.

Early in the year some work was done with the Fire Prevention Officer in an endeavour to calibrate the hazards of drip feed oil stoves. There was so much difficulty in producing a uniform draught of constant speed without building a very expensive wind tunnel, that the project had to be abandoned.

#### *Field Work—Gloucester County*

Continuing from 1959 the temporary chlorination of Old Dean Hall School water supply was maintained until the public supply was connected.

After a few weeks the school water showed an unsatisfactory bacterial count, so chlorination was restarted and maintained for a further term.

The chlorinator has now been disconnected, and subject to a final satisfactory water sample will shortly be returned to the laboratory.

Assistance has been given to several schools where swimming pools have been built.

Stratford Park Pool, Stroud U.D.C. has also been visited to confirm the satisfactory working of the latest design chlorination plant installed there.

In the last two months of the year two sewage purification problems have received much attention. At the County Farm Institute where the existing settlement tank and sludge drying bed were unsatisfactory, it was recommended that a good septic tank be built, feeding the effluent on to the existing filter through the distributor which needs some adaption.

In the North Cotswold area, the effluent from a poultry packing station appeared to be causing trouble at the sewage purification works. After a series of visits, with appropriate sampling, preliminary treatment at the factory, coupled with a Trade Waste Discharge Agreement under the appropriate Acts was recommended. At the close of the year assistance was being given in the chemical and biological control of the activated sludge process of this sewage purification works.

#### *Conclusion*

The assistance which it has been possible to give to a few of the people with problems of the nature outlined above has produced some very kind comments and emphasises the need for on-the-spot investigations.

The officer is encouraged to say that, under the Adviser, and subject to his existing commitments, he is ready to assist in any technical problem to which he is called. If matters of an unfamiliar nature arise there always seems to be some friendly expert available who can give the benefit of his experience and so help to produce the right answer.

### **PART IV. RAG FLOCK ACT**

Thirty-five samples were taken informally and examined with reference to the 1913 Regulations. A preliminary microscopic examination for the nature of the fibre involved is of considerable value in determining whether or not the chloride limit test is applicable. With one exception all samples satisfied the 30 parts per 100,000 maximum chloride (C1) requirement. The exception RF.26, Rag Flock, contained 42 parts per 100,000.

There is little change to report concerning the enforcement of the Rag Flock and Other Filling Materials Regulations 1951, SR. 1846. These Regulations had several objectionable features and could in particular only be satisfactorily and economically carried out by a relatively small number of Public Analysts prepared to set up the necessary apparatus and with a guaranteed minimum of at least 100 samples per annum. It also appears desirable to revise the ridiculously low fees for specialised analyses which were proposed ten years ago and there are signs that the Ministry of Housing and Local Government may be giving some thought to these difficulties for there is little doubt that as originally conceived the 1951 Regulations sought to place the work in the hands of the Public Analyst at least finally rather than leaving the analytical work in the control of "prescribed Analysts" who seem in the main associated with the Trade interest.

### **PART V. PHARMACY AND POISONS ACT**

Fifty-one samples were examined for active principles and close attention was also paid to labelling. A selection of the more interesting of these products is given.

*P. and P.4 Vaporising Fumigator*—contained 45·4 per cent v/v of nicotine against a declared 37·5 per cent v/v. Whilst this excess of nicotine is not perhaps to the prejudice of the purchaser in respect of the quantity of nicotine received, one would perhaps expect better accord with the declared nicotine content.

*P. and P.8 Liquor Cresolis Saponatus B.P.*—this product was of satisfactory composition, and since it was described as Liquor Cresolis Saponatus B.P. it must comply with the monograph laid down for that article. This being so the following labelling faults were apparent:

- (a) The words “nearly twice the germicidal strength of ordinary Lysol” cannot be justified since the product is the same cresolic strength as Lysol.
- (b) The words “super Lysol” are similarly not justifiable.

*P. and P.12 Glasshouse Fumigating Tubes*—contained 20 per cent w/w of nicotine. Its actual nicotine content was only 2·3 per cent w/w, which suggests that the article is of some age or has been subjected to adverse storage conditions. Further sampling is desirable.

*P. and P.14 Sanitary Fluid*—contained 29·1 per cent w/w of formaldehyde against a declared 30 per cent w/w and is satisfactory in this respect. The product is a Part II poison under the *Pharmacy and Poisons Act*, and as such should bear the name and address of the seller. No such information had been provided.

*P. and P.19 Resin Glue with Formic Acid Hardener*—the sample consisted of two separate articles, one being a polythene packet of a solid (the glue) and the other, a bottle labelled Hardener GBP.X

FORMIC ACID w/v 34·4%	Wt. per ml.
„ „ w/w 31·9%	1·078 g.

The contents had the above composition and in this respect was quite satisfactory. There is no doubt whatsoever that the bottle itself contains a *Part II Poison* and cannot be exempted under the Rules. Had the two articles been sold in a mixed state, they might have been exempted under the heading of “adhesives”. Therefore the vendors must be registered with the Local Authority. In all other respects i.e. labelling, the sample is astisfactory.

*P. and P.20 Synthetic Resin Glue*—the sample was in two portions, glue and hardener. The hardener was labelled as “Hardener Gux” and it was stated to contain acid which should not be allowed to come into contact with the skin. There was the further instruction—use with care. This hardener contained 24 per cent w/w of formic acid and must therefore be regarded as a Part II poison.

*P. and P.28 Rust Destroyer*—no reference to the active ingredient on the label, save that it was mildly corrosive. On an accompanying leaflet, phosphoric acid was declared to be present. The label contained sufficient warnings, in view of the nature and amount of the acid. The phosphoric acid content was 39·6 per cent w/w and it is to be hoped that there will soon be some restriction on the sale of strong solutions of phosphoric acid similar to those controlling formic acid.

*P. and P.42 Spot lifter*—the carton and the tube was marked “inflammable” but in rather small print and both were rather inconspicuous. This, in fact, was the only criticism, and in my opinion both tube and carton could be marked more prominently with the words “Inflammable—keep away from naked flames.” This might prevent small accidents in the home. A general observation on this type of collapsible tube pack is the danger of mistaking it for toothpastes or some foodstuffs which are now similarly packed.

## PART VI MISCELLANEOUS ANALYSES

Table 9

*General*

1.	City of Bristol	..	..	..	..	..	185
2.	Biochemical and toxicological	..	..	..	..	..	62
3.	Foreign bodies, insects and infestation	..	..	..	..	..	122
4.	Gloucester County	..	..	..	..	..	41
5.	Gloucester City	..	..	..	..	..	—
6.	Zinc and fluorine determinations	..	..	..	..	..	23

*Bristol Corporation Departments*

7.	Central Purchasing and Town Clerk	..	..	..	..	..	2
8.	City Engineer	..	..	..	..	..	112
9.	Port Health Office	..	..	..	..	..	714
10.	City Architect	..	..	..	..	..	3
11.	Baths	..	..	..	..	..	1
12.	Housing	..	..	..	..	..	3
13.	Public Health Inspectors' samples	..	..	..	..	..	23
14.	Cemeteries	..	..	..	..	..	1
15.	City Valuer	..	..	..	..	..	1
16.	Education	..	..	..	..	..	4
17.	Fire Brigade	..	..	..	..	..	3
18.	Port of Bristol	..	..	..	..	..	4

*Other Authorities*

19.	Bristol Mental Hospital	..	..	..	..	..	1
<hr/>							

1. *City and County of Bristol—General examinations*

The 185 specimens from various sources include also certain essential examinations made for purely laboratory information. A few of the more interesting items are selected for brief comment.

The first specimen gives an opportunity to make yet another plea for the correct use of food containers. The examination of a bottle of lemonade indicated the presence of a small amount of petrol and it was apparent that the bottle had earlier been used to store petrol—an illegal practice. Over the years many instances of the use of food containers for the storage of strong smelling fluids have been noted and the public does not help its case for clean food by returning such containers to the manufacturers.

Two toy watches were submitted from Taunton because of suspected radioactivity. The dials of these watches were undoubtedly luminous but not radioactive. The luminosity was due to zinc sulphide.

A dye stuff used in the manufacture of sausages was shown to be Ponceau MX, a permitted dyestuff.

A sample of carrots was found to have an unpleasant oily taint which was shown to be due to vaporising oil used by tractors in preparing the soil. The oil can apparently be taken up by the root system. Certainly the carrots proved quite uneatable.

Some large sized tablets proved to be essentially sodium bicarbonate. The tablets were obviously intended for use in preparing a solution in which to soak and tenderise dried peas.

The Deputy Medical Officer of Health submitted several samples of dusts from domestic pets and household furniture such as upholstered chairs and settees. The request was for the possible detection of flea infestation in relation to its possible cause of *Papular Urticaria*. This was the subject of a paper in

the British Medical Journal in May 1956, p. 1131. The species can apparently be recognised only in the adult form and it thus becomes desirable to rear eggs and larvae to the adult stage. A technique is given in the paper for this purpose and is stated to rear 90 per cent of adult fleas from the eggs collected. From the various dust specimens submitted to us several insects have been noted including a red mite and live psocids. In one dust from a tortoise box, two minute flies belonging to the genus *Psychoda* were found. According to Dr. Paul Freeman of the British Museum, this and similar species are found in damp situations and around household drains, but have never been accused of biting man. These flies can therefore be ruled out as a cause of urticaria, at any rate as a result of bites. Attempts have been made to rear fleas from the dusts submitted but to date without success.

Several samples of tea infusion, water, tea and sugar were examined with reference to a complaint from a railway employees canteen concerning the taste of the infusion. The complaint could not be substantiated and there was a strong suspicion that the trouble arose from the lack of hygienic control of the cups and spoons used by the men in a small railway hut used for their tea breaks.

A complaint made by a Corporation employee involved two samples, one of soldering fluid and the second of the liquid taken from the carburettor of the individual's car. The vehicle had apparently been left in a yard and was unattended for long periods. On two occasions the vehicle stalled when the owner attempted to start for home after work. To our own amazement and the disgust of the complainant we found that the fluid from the carburettor contained petrol and urine. The man, a foreman in a depot, subsequently delivered a warning to the men in his charge and as far as we know there has been no recurrence of his troubles.

A sample of dried onion alleged to have been used in the preparation of some meat pies caused the wholesale rejection of a large number of pies because of the development of a most offensive smell. It was demonstrated that the trouble was without doubt due to enzymic action on the natural sulphur compounds in the onion resulting in the development of mercaptan like compounds of most offensive odour. An odd fact arising from the complaint was that the smell of the offending pies was more or less normal once the pies had cooled down several hours later.

Banana stems were found to have deposits of Bordeaux mixture.

Ham rolls in polythene bags had a strong smell due to the freshness of the rolls, the predominant yeasty smell being retained by the bag.

A complaint regarding canned sardines were found to be due to the curd-like material in the fish which was produced during processing.

A sterilised milk from a private complainant was found to contain 86 per cent of added water, and one was almost tempted to report as a sample of water adulterated with 14 per cent of milk. It appeared that plant washings had been accidentally bottled and sent out as milk.

## 2.—Biochemical and Toxicological

The bulk of the work under this heading relates to blood and urine samples examined for lead content. Sixteen bloods and 18 urines were submitted.

Other examinations were made upon a breast milk and a proprietary baby food for their respective Vitamin B<sub>1</sub> contents, hair and nails tested for arsenic, and one urine examined for mercury and found to contain 0.026 mgm. per 24 hours. The latter case was of interest inasmuch as a mercury based teething powder was alleged to have been given to a two year old child. The powder was obtained from a general store in a rural area outside the City.

The presence of lead was confirmed in the stomach contents of an individual who had committed suicide by swallowing paint.

Three further urines examined for mercury had in one instance a somewhat excessive amount, 0·04 mgm. per 24 hours specimen (normal range 0·0005 to 0·001 mgm. per 24 hours), a second contained 0·08 mgm, whilst the third sample was free from mercury.

One sample of raw plums contained no lead, arsenic or copper.

Two specimens of urine were examined for selenium which was demonstrated to be absent.

One vomit was free from lead and arsenic but contained traces of sodium, magnesium, copper, silicon, iron and tin as might be expected from the normal diet.

Two samples of water submitted by a Hospital Dispensary were shown to comply with the B.P. standards for purified water.

### 3—Foreign Bodies in Foods etc. including infestation and Identification of Insects

Table 10

Lab. No.	Article	Comment
M. 26	Sliced loaf .. . . .	Foreign matter shown to be portions of soiled dough with mineral oil.
74	Bread .. . . .	Contained portions of soiled dough and fragments of husk.
77	Custard tart .. . . .	
78	Cooking fat .. . . .	
79	Custard powder .. . . .	
80	Dried milk .. . . .	
85-94	Butters .. . . .	Only the cooking fat showed slight abnormality being slightly rancid
130	Joint of meat .. . . .	No evidence of contamination with aluminium dross
139	Bread .. . . .	Foreign matter was a portion of faeces of the cow or sheep
146	Menthol and eucalyptus pastilles .. . . .	Insect shown to be the red rust flour beetle "Grittiness" due to small sugar crystals and not to sand as alleged
147	Processed English Peas .. . . .	Insect shown to be the common ground beetle
149	Meat pie .. . . .	"Insect" larva shown to be <i>Ephestia</i> larvae
184	Canned salmon .. . . .	Alleged glass fragments were the naturally occurring struvite
188	Bread .. . . .	Foreign matter shown to be portions of a rubber washer
191	Part of a loaf .. . . .	Contained fragments of a moth
197	Bread .. . . .	Foreign matter was soiled dough
202	Weetabix biscuit .. . . .	Black deposit was a portion of charred biscuit
204	Milk powder .. . . .	Brown particles were portions of milk powder overheated during processing
242	Milk bottle .. . . .	Foreign matter most probably residues of cement
252	Oat food .. . . .	No infestation by moth larvae or mites
241	Milk powder .. . . .	Foreign matter consisted of 6 long hairs of horse hair probably from a brush or broom and 3 short flat hairs of sisal from a stiff brush
268	Vinegar .. . . .	Vegetable debris present with twenty small fruit flies of species of <i>Drosophila</i>
274	Ground rice .. . . .	Live larvae and webbing of <i>Ephestia kuehniella</i>
290	Insect .. . . .	Classified as belonging to the cockroach family
303	Bread .. . . .	Foreign matter was a portion of soiled dough
321	Loaf of bread .. . . .	Contained a soft sticky patch with an objectionable acetoous odour. Condition characteristic of infection by "rope" due to the organism <i>mesentericus vulgaris</i>

<i>Lab. No.</i>	<i>Article</i>		<i>Comment</i>
M. 326	Piece of bread	.. ..	Portions of an insect probably <i>Tribolium</i> or <i>Ptinus</i>
330	Bread	.. ..	Contained portions of soiled dough but no rodent excreta
331	Milk bottle	.. ..	Dark particles were small particles of dust
332	Orange drink	.. ..	Contained portions of a stoutish buff envelope
334	Skimmed milk powder	.. ..	Contained a number of soft bodied lice—probably the Book lice
335	Continental Slice (Fancy cake)	.. ..	Contained one pellet of rodent excreta on the top of the slice
340	Butter	.. ..	Contained fragments of metallic tin
341	"	.. ..	Contained pieces of skin and cow hairs
344	Corned beef	.. ..	Contained small "glass like" fragments of struvite
346	Canned salmon	.. ..	
350	Picnic bar	.. ..	Some attack by insects—the Mediterranean flour moth
359	Larvae	.. ..	Identified as <i>Tenebrionidae</i>
372	Insects	.. ..	Identified as Flower Bugs; <i>Anthocoris Confusus</i>
376	Piece of cake	.. ..	Contained mould growth of the penicillium species
7			
73	Bread	.. ..	Contained soiled dough
378	Brown bread	.. ..	Lighter patch in brown bread due to lighter rough
379	Part of loaf	.. ..	Contained five moths with mesh of webbing and excreta
380	Fancy cakes	.. ..	One cake had a small dead larval form of the flour moth.
389	Bread crumbs	.. ..	Contained fragments of charred dough
392	Slice of bread	.. ..	Contained a brown beetle— <i>Ptinus tectorius</i>
396	Bread crumbs	.. ..	Contained fragments of the meal worm
409	Bread bap	.. ..	Contained a whole insect of the yellow meal worm species
411	Sultanas	.. ..	Grubs were of the species of <i>Ephestia</i> moth
413	Dried milk powder	.. ..	Brown particles were masses of minute unicellular organisms. These were yeast-like cells compacted into masses
414	Meat pasty	.. ..	Foreign body was a portion of a tooth whose source could not be ascertained
428	Part of a pork pie	.. ..	Contained pellicles of mould growth
443	Dust from mat	.. ..	Some mites present
444	Material from cat	.. ..	No fleas or other infestation
445	Material from bird cage	.. ..	
446	Grapenuts	.. ..	Contained one specimen of <i>Ptinus tectorius</i>
447	Maggot in bread	.. ..	Larvae of the <i>Ephestia</i> moth
449	Chocolate biscuit	.. ..	Excreta and webbing probably of the cocoa moth
451	Porridge oats	.. ..	Webbing and one live moth of the <i>Ephestia</i> type
452	Stuffing	.. ..	Some webbing and one small moth
455	Sliced loaf	.. ..	Several lengths of jute fibres. Not cooked with the loaf but probably introduced during the slicing process
456	Part of a bar of Kit Kat	.. ..	Webbing and excreta probably of the <i>Ephestia</i> moth
457	Corned beef	.. ..	Small tuft of hairs of bovine origin incorporated probably during the canning of the meat
465	Tin of apricots	.. ..	The portion of foreign material resembled chewing gum but this was disproved and the material seemed to consist mainly of rubber and a zinc compound probably zinc oxide

<i>Lab. No.</i>	<i>Article</i>		<i>Comment</i>
466	Ice lolly	.. ..	Foreign matter consisted of a small bundle of jute fibres probably derived from sacking
480	Raspberry split	..	Foreign matter was a small piece of brass, $\frac{7}{8}$ " long and $1\frac{1}{10}$ " wide
482	Battenburg fancy cake	..	Small foreign body was a caraway seed
486	Custard slice	..	Insect identified as the front portion of the German cockroach or Steam fly, <i>Blatella germanica</i> . Caterers fined £5
489	Sterilised milk bottle	..	Bottle about $\frac{1}{4}$ full of milk with a large portion of fungal growth. Dairy subsequently fined £75.
493	Cheese sandwich	..	Green foreign matter was mould growth. The small insect also present was a moth larva
494	Bread	.. ..	Foreign matter was a portion of charred flour
495	Bread	.. ..	Foreign matter was a husk and soiled dough
496	Foreign body from fruit	..	An almost black body $\frac{5}{8}$ " long and $\frac{1}{4}$ " wide bearing a strong resemblance to a small mummified hand, but shown to be a seed capsule of a herb which had dried out in a most unusual shape
513	Cornish pasty	..	A mass of fluff in the filling of the pasty
520	Bread	.. ..	Carbonised and burnt oil and not charred flour or dough
522	Dark substances in bread		Found to consist of a soiled dough
525	Sliced Bread	..	Contained a thin piece of cardboard

Most of the foregoing specimens were the result of complaints received by the Food Inspectorate from members of the public. Where action was necessary a warning letter or a visit by the Inspector usually sufficed. Only in a few cases was it necessary to institute proceedings.

#### 4—Gloucester County

Forty-one specimens were examined and these are tabulated in the report to the County authority.

#### 5—Gloucester City

No miscellaneous samples were submitted in the year under review.

#### 6—Zinc and Fluorine

The survey on the two sites in the Avonmouth area for zinc and fluorine continued throughout the year. The information is summarised in Table 29 under Part IX Atmospheric Pollution.

#### 7—Central Purchasing Department

Two samples of Lysol prepared by different manufacturers were compared and showed little chemical difference. These are the last two samples to be examined for the Central Purchasing Department, as following a recommendation of the O and M specialists it is to be disbanded.

#### 8—City Engineer's Department

The majority of the 112 specimens submitted were soils and subsoil waters for examination for sulphates in connection with various building projects. Other items included rock, fragment of metal, packing and drainage from a culvert and a bituminous material from a trench filling.

### 9—Port Health

Some 714 samples were submitted by the Port Inspectorate. The bulk of the specimens consisted of canned goods from all parts of the world, whilst dried fruit and fresh fruit accounted for most of the remaining samples.

For the most part the canned goods were in excellent condition and free from undue metallic contamination, that is, excess of tin, lead and copper. A few samples of corned beef contained undue amounts of lead ranging from 5 to 27 parts per million and one sample actually contained a sizeable piece of solder. Corned beef being a solid pack is very difficult to sample satisfactorily and generally lead contamination is erratically distributed throughout the mass. Heaviest contamination as might be expected occurs at the can ends and seams, and one suspects that the brogue holing sealing method may increase the possibilities of lead contamination of the pack.

Canned fish products particularly from Japanese waters have been regularly monitored with a small Panax instrument and so far without any evidence of radioactivity.

Fresh citrus fruits have all satisfied the statutory requirements in respect of the addition of diphenyl or ortho-phenyl-phenol.

One sample of spray dried skim milk powder had a rather high free acidity which would warrant prompt release and use if the commodity was to be saved.

A bread improver ex Holland was shown to be a glycerinated fat of the type permitted to be used in food manufacture. The product was pure and free from liquid paraffin and mineral oil.

Several samples of grapes were found to be dusted with sulphur. This is a technical but harmless infringement of the Preservative Regulations.

Sliced gherkins in glass jars were in satisfactory condition and in particular free from benzoic acid.

A sample described as "Farinoca" was principally potato starch partially gelatinised and pressed into platelets.

A number of bottled jams, raspberry, strawberry and apricot of Hungarian origin were found to be low in total soluble solids. Several samples of some fifty examined ranged from 60 to 65 per cent soluble solids. The requirement for hermetically sealed jams is a minimum of 65 per cent. This fault was unfortunate in otherwise excellent jams.

Samples of peach and cherry pie fillings were re-examined some months after the preliminary finding of added benzoic acid. Such addition is not permissible by our Preservative Regulations and representations were made to the Canadian authorities. These follow-up samples were free from benzoic acid.

An "Irish Coffee" chocolate preparation was stated to contain "Irish Whisky" and had in fact just sufficient alcohol to justify the name and at the same time to satisfy the Excise requirements. "Irish Coffee" itself is a somewhat better commodity being prepared in certain Irish hotels and consisting of a mixture of Irish Whisky and Coffee topped off with a thick cream.

Fresh strawberries of French origin entered this country by air as the first of the season's crop. They were inspected at Lulsgate airport and submitted for analysis.

A canned fruit salad from Spain showed signs of incipient fermentation with break down of the fruit which looked soft and "fluffy" and certainly unappetising.

Some seedless raisins from Iran contained straw and fibres and were not quite of the quality to be expected.

Samples of Hamburger Relish and Hot Dog Relish from U.S.A. contained small but declared amounts of alum.

*10—City Architect*

*11—Baths Superintendent*

*12—Housing*

*14—Cemeteries*

*15—City Valuer*

*16—Education*

*17—Fire Brigade*

*18—Port of Bristol*

*19—Bristol Mental Hospital*

The various specimens received from the above Departments are considered serially as they reached the laboratory during the year. The number in brackets refers to the source of the sample.

M.	65	Plastic material (10)	..	Solvent action on this material was negligible. The material was mildly combustible leaving glass fibres
	66	Beef sausages (19)	..	67 per cent meat content
	76	Mortar mix (10)	..	Not more than 2 per cent of mortar instead of the 12.5 per cent as specified
	107	Fluid from Fire Engine (17)	}	Two liquids very similar
	108	Petrol and foam	..	Not more than 6 per cent of mortar instead of the 12.5 per cent specified (see M.76 above)
	111	Mortar mix (10)	..	Dust contained 7 per cent of siliceous matter. Material contained wood dust arising from abrasion of floor by roller skates
	143	Dust from skating hall (11)		Inner and outer renderings of M.161 very similar. Outer renderings of M.162 very different with more sand and less lime
	161	Rendering (12)	..	Disinfectant actions compared
	162	Rendering (12)	..	Insignificant solvent action and less fire risk than M.65 above
	177	Disinfectant solution (16)	..	Actions compared
	178	Disinfectant solution (16)	..	Demonstrated to be blow flies
	180	Fire protective (10)	..	Examined for flash point
	311	Disinfectant fluid (16)	..	This preparation appeared to consist of zinc oleate in a petroleum jelly
	312	Disinfectant fluid	..	Composition required
	347	Insects (12)	..	Contained 36 per cent of phenols
	363	Witch Hazel (18)	..	Comment made on the removal of oil from Dock waters
	430	Bird repellent preparation (15)		Flash point and nature of liquid determined
	450	Killgerm Fluid (16)	..	Cream had an unpleasant and persistent smell and could not be regarded as satisfactory for use by food handlers
	487	Weedkiller (14)	..	Material mainly calcium carbonate with some iron oxide
	490	Emulsion (18)	..	
	510	Petroleum spirit (17)	..	
	511	Water-less cleansing cream (18)		
	516	Deposit from boiler (18)	..	

## 13—District Public Health Inspectors Samples

The 23 specimens submitted included insects and—

1	Water from a kitchen tap	..	No evidence of lead, copper, iron or zinc
2	Insects	.. ..	Identified as Plaster beetles and a species of <i>Cryptophagus</i>
3	Rust-like material	.. ..	Identified as a brown algae
4	Lunch tongues	.. ..	Small dark patches due to interaction of traces of metals with sulphur compounds in the meat
5	Itching powder	.. ..	Powder consisted of the hairs from the pods of cowhage. This is a legume indigenous to India, Africa and South America. The hairs are extremely irritating to the skin and when used medicinally have a rubefacient and anthelmintic action. Owing to these properties it is very unwise to use the powder indiscriminately, especially near the eyes
6	Insects		Confirmed as bed bugs
7	Grubs and fleas	.. ..	Identified as cat or dog fleas
8	Beetle	.. ..	Identified as the meal worm <i>Tenebrio molitor</i>
9	Insects	.. ..	Identified as <i>Dermestidae</i>
10	Shark skin coat	.. ..	Observations made on staining on the coat
11	Choice dairy butter	.. ..	Mould growth on wrappings and on the butter
12	Deposit from a roof	..	Problem resolved by visit to the site concerned
13	Canned blackcurrants in syrup		Severely blown. Fruit decomposing and fermenting
14	Rat bait	.. .. ..	Found to be barium carbonate and not arsenious oxide as suspected
15	Insects	.. .. ..	Several insects identified including house mites and two beetles
16	Dusts (from dog's bedding)		No insect life or larvae
17	„ (from tortoise box)	..	Two minute moth flies
18	„ (from budgerigar)	..	No insect life or larvae
19	„ (from armchair)	..	Possibly one flea
20	„ (from cot)	.. ..	No insect life or larvae
21	Disinfectant	} .. ..	Comparative tests of efficiency required
22	„		
23			

## PART VII. REPORT ON WORK FOR THE COUNTY OF GLOUCESTER

This is the ninth annual report on the analytical services provided for the County in accordance with the agreement of 1951. The bulk of the work relates to analyses in accordance with the *Food and Drugs Act* and the *Fertilisers and Feeding Stuffs Act*, but the report also includes work on Atmospheric Pollution, Chlorination and Miscellaneous Analyses for the County and for Urban and Rural Districts.

**Table II—Summary of Examinations**

	<i>Total</i>
Milk	735
Food and drugs	531
Waters and swimming baths	97
Fertilisers and feeding stuffs	72
Miscellaneous	41
	<u>1,476</u>
Atmospheric Pollution—	
Lead peroxide	75
Deposit gauges	74
Spectrophotometric analyses	31
Chlorination visits and inspections	31
	<u>211</u>
<b>GRAND TOTAL</b>	<b>1,687</b>

**Table II—Summary of Milk Analyses**

	<i>Total</i>
Fat deficient	34
Added water	4
Abnormal solids-not-fat	38
Poor quality fat. Just less than 3.0 per cent.	14
Suspicious. Low S.N.F. and freezing point depression less than 0.530°C.	—
Channel Island satisfactory	125
Channel Island unsatisfactory	10
Channel Island, poor quality	2
Total Milks	735
Formal samples	265
M.M.B. Contract	11
M.M.B. Contract. Poor quality	—
M.M.B. Contract S.N.F. abnormal	—
Appeal to cow	3

Thus of 735 samples examined, 38 were abnormal in respect of solids-no-fat, that is they gave figures below 8.5 per cent but the freezing point depression did not indicate added water.

Of the 125 Channel Island Milks examined, 10 were deficient in fat and 2 were of poor quality.

Of the 610 Ordinary Milks examined, 34 were deficient in fat, 4 contained added water, and 14 were of poor quality.

*The adulterated or otherwise irregular samples may be summarised thus:—*

Three samples of sausages contained undeclared preservative.

Two Halibut Liver Oil capsules were deficient in Vitamin A.

Seventeen pies were returned as unsatisfactory inasmuch as they contained less than 20 per cent of meat.

Two meat pastes contained less than the statutory requirement of 55 per cent of meat.

Two samples of cheese contained in one case excess moisture and in the second was deficient in fat on the dry basis when assessed on the respective requirements in the country of origin.

One whisky contained 64·6 per cent of proof spirit indicating the presence of at least 0·6 per cent of added water.

One mincemeat was slightly deficient in fat and had a small excess of acetic acid.

One pork sausage contained only 60 per cent of meat together with 32 p.p.m. of undeclared preservative.

A loaf of bread contained portions of a black beetle.

A bottle of Coca Cola contained two safety razor blades.

**Table 13—Waters Effluents, etc.**

Mains supplies (Public and Private) .. .. ..	18
Wells, boreholes, springs, etc. .. .. ..	29
Streams .. .. .. ..	10
Seepage .. .. .. ..	1
Sewage and Trade effluents .. .. .. ..	16
Swimming Pools and Baths .. .. .. ..	23
	97

Forty-seven samples of drinking water were examined. Thirty-eight were satisfactory, the remainder possessed undesirable features from a chemical point of view.

**Table 14—Miscellaneous Samples—Including Atmospheric Pollution Examinations**

Atmospheric pollution—					
Lead peroxide .. .. .. ..	75				
Deposit gauges .. .. .. ..	74				
Milk .. .. .. ..	11				
Soils and sub-soil waters .. .. .. ..	2				
Flies .. .. .. ..	1				
Deposit from sewer .. .. .. ..	1				
Canned Pears .. .. .. ..	1				
Loaf .. .. .. ..	1				
Liquorice Allsorts .. .. .. ..	1				
Insects .. .. .. ..	2				
Sand .. .. .. ..	2				
Blue Clay .. .. .. ..	1				
Clay .. .. .. ..	2				
Canned Pineapple Pieces .. .. .. ..	1				
Gravel .. .. .. ..	1				
Water .. .. .. ..	2				
Ice Lolly .. .. .. ..	3				
Canned Peaches .. .. .. ..	1				
Small Apple Pie .. .. .. ..	1				
Fish meal .. .. .. ..	1				
Aggregate .. .. .. ..	1				
Seepage .. .. .. ..	1				
Soil or Packing Material .. .. .. ..	1				
Maggot in Milk Bottle .. .. .. ..	1				
Sausage Roll .. .. .. ..	1				
Sliced loaf .. .. .. ..	1				

### *Survey of Samples of Cheese*

#### *Cheddar Types*

The country of origin requires a minimum of 50 per cent of fat calculated on the dry basis. There is no standard prescribed for moisture.

Number of samples examined	..	..	39
Range of moisture per cent	..	..	27·0 to 35·7
Range of fat on dry basis per cent	..	..	45·5 to 58·2
Number failing to comply	..	..	3
Price range per lb.	..	..	2/5½d. to 6/0d.

Includes 3 Australian Cheddar and 6 Canadian.

#### *Danish Blue*

The country of origin requires a minimum of 45 per cent of fat on the dry basis with a maximum of 46 per cent of water.

Number of samples examined	..	..	31
Range of moisture per cent	..	..	29·0 to 48·3
Range of fat on dry basis per cent	..	..	44·7 to 69·2
Number failing to comply	..	..	2
Price range per lb.	..	..	3/2½d. to 5/4d.

Includes one Mini Fynbo (not a Danish Blue Cheese) and one Norwegian Blue.

#### *Dutch Edam*

The country of origin requires a minimum of 40 per cent of fat on the dry basis with a maximum moisture (according to the season) of 47 to 48 per cent.

Number of samples examined	..	..	20
Range of moisture per cent	..	..	37·9 to 54·2
Range of fat on dry basis per cent	..	..	31·0 to 49·0
Number failing to comply	..	..	8
Price range per lb.	..	..	2/5d. to 4/0d.

Of the three varieties of cheese analysed during the year there were 3 failures of the 39 Cheddar types, 2 failures in 31 Danish Blue Cheeses, and 8 failures in the Dutch Edam types of 20 examined. The high proportion of failures in the Dutch Edam types could be attributed in some instances to some drying out of the cheese at the cut surface whilst in the hands of the retailer. There is a remarkable price variation per pound of cheese which bears no relation to the moisture or the fat content of the article.

### *Fertilisers and Feeding Stuffs Act*

	<i>Formal</i>	<i>Informal</i>	<i>Requiring Comment</i>
Fertilisers	..	5	6
Feeding Stuffs	..	37	7

Of the six fertiliser samples requiring comment, one fish meal contained excess of insoluble phosphoric acid, two granular fertiliser likewise, two fertilisers contained an excess of potash, one sulphate of potash was undeclared in K<sub>2</sub>O content.

Of seven feeding stuffs, a Sow and Weaner Meal contained too little oil and a Chick Mash was likewise deficient. Pig pellets contained an excess of oil, a Pig Fattening Meal and Turkey Starter Crumbs were both slightly deficient in protein, whilst a Millers Offal and Hill Sheep Pencils contained an excess of fibre.

## PART VIII. REPORT ON THE WORK FOR THE CITY OF GLOUCESTER

**Table 15—Summary of Examinations**

Milk	..	..	..	..	18
Foods	..	..	..	..	38
Water	..	..	..	..	5
Atmospheric Pollution—					
Lead Peroxide	..	..	..	..	24
Deposit Gauges	..	..	..	..	24
Fertilisers	..	..	..	..	6
Spectrographic Analysis	..	..	..	..	1
					116

Five samples required comment although only one was adulterated. This was a milk found to be 6·7 per cent deficient in fat. Eleven milks were "appeal to cow" samples with a bulk fat of 2·8 per cent.

A sample of Chicken Patties contained only 14·6 per cent of meat calculated on chicken. I have suggested 25 per cent of chicken as a reasonable standard but expressed doubt on the chances of establishing this in a court of law.

Three of the six fertiliser and feeding stuff samples required comment. An organic fertiliser contained excess of nitrogen, phosphate and potash; a fertiliser based on peat was deficient in insoluble phosphate with a slight excess of soluble phosphate, whilst a bone meal was under declared on phosphate.

## PART IX. ATMOSPHERIC POLLUTION

**Table 16**

	<i>Bristol</i>	<i>Gloucester County</i>	<i>Gloucester City</i>
Lead peroxide ..	90	75	24
Deposit gauges ..	64	74	24
Zinc and fluorine ..	23	—	—
Smoke recordings, City ..	221	—	—
Smoke recordings, Port of Bristol Authority ..	642	—	—
	1,040	149	48

The total number of examinations for the year was 1,237 or just over 12 per cent of the Department work.

### *The City Survey*

The five stations concerned in this survey were Marsh Street (City Centre), Shaftesbury Crusade (St. Philip's), the Zoological Gardens (roof of the elephant house), Blaise Castle (roof of the stables), and Wootton Road, St. Anne's (garden of a private house). After the first quarter the Site at St. Anne's was abandoned so full years observation concerns four stations only.

It is worthwhile to indicate how the degree of pollution is measured and in respect of the rain gauges, we have the D.S.I.R. approved apparatus which consists essentially of a glass collecting bowl of known area, which feeds the rainfall into a bottle of some 10 litres capacity. Very approximately a full bottle of 10 litre would represent some 5 inches of rainfall. Each apparatus is left for one month, and on or about the first of each month the rainfall is collected and a fresh 10-litre bottle placed in position. In all cases the bottle

is contained in a lagged box to protect it during frost conditions. At periods of heavy rain it may be necessary to inspect each site at mid-month, or as dictated by weather conditions. Upon receipt at the laboratory, the collected rainfall is measured and examined for soluble, insoluble and tarry matters with estimations of calcium, chloride, sulphate and pH value. The Local Authority is a co-operating body of the D.S.I.R. in pollution surveys, and all results are submitted for correlation and assessment to the Director of the Warren Spring Laboratory, at Stevenage, Herts.

The trends of the last seven years can be seen from the following tables.

**Table 17**

<i>Deposit gauge</i>	1954	<i>Total deposit in tons per sq. mile per year</i>					
		1955	1956	1957	1958	1959	1960
Waterworks ..	263	187	201	156	172	146	138 (11 mths.)
Shaftesbury Crusade ..	273	226	206 (11 mths.)	180	193	216	184 (11 mths.)
Zoological Gardens ..	143	126	101 (11 mths.)	105	101 (11 mths.)	114	115
Blaise Castle ..	124	103	110 (11 mths.)	93	108	115	100
St. Annes ..	—	—	—	156	188	152 (11 mths.)	30 (3 mths.)

The improvement in general conditions noted in 1959 is well maintained and the depositions at the Waterworks offices, Shaftesbury Crusade and the Zoological Gardens are at practically the same level. At Blaise Castle there is a distinct improvement over the 1959 and 1958 depositions and a return to something approaching the best year 1957. No conclusions are drawn from the short period of survey at the St. Annes Site.

**Table 18**

<i>Rainfall</i>	1954	1955	1956	1957	1958	1959	<i>Total rainfall in inches</i>	
							1960	(11 mths.) (40.0)*
Waterworks ..	41.4	23.7	25.7	27.2	34.5	27.6	36.7 (11 mths.)	(40.0)*
Shaftesbury Crusade ..	38.7	22.5	24.1	28.1	34.4	29.4	34.1 (11 mths.)	(37.0)*
Zoological Gardens ..	40.2	25.5	26.9	32.9	36.0	31.0	41.0	
Blaise Castle ..	40.2	24.4	25.2	32.6	33.7	30.1	39.7	
St. Annes ..	—	—	—	—	27.6	36.5	30.7	7.6 (3 mths.)

\*Corrected to 12 months for comparison.

There is perhaps little need to comment on the rainfall in 1960 but it is of interest to note that the year parallels the rainfall for 1954 and that the rainfall has increased year by year since 1955 and in 1960 practically doubled the 1955 figures. The Meteorological Office in the Kingsway has recorded some 48 inches of rain for 1960, the highest figure, they state, in living memory. It is understood that 49 inches were recorded in 1872 and just over 50 inches in 1852. We can only hope for better things in 1961!

**Table 19**

Sulphur Pollution	Average SO <sub>3</sub> mgms. per 100 sq. cm. per day						
	1954	1955	1956	1957	1958	1959	1960
Waterworks ..	1.94	3.0	2.03	2.24	2.06	1.34	1.36
Shaftesbury Crusade ..	2.29	2.75	2.07	2.40	2.04	1.37	1.37
Zoological Gardens ..	0.61	1.18	0.89	1.05	1.20	0.81	0.64
Blaise Castle ..	0.96	1.24	1.10	1.03	0.93	0.96	0.62
St. Annes ..	—	—	—	1.17	1.00	0.77	1.11

The gratifying results of falling sulphur pollution noted in 1959 continued in 1960. The levels at the Waterworks and Shaftesbury Crusade are identical with the 1959 results, whilst pollution levels at the Zoological Gardens and Blaise Castle are at the best and lowest level for the seven years reported in the Table. These excellent results may be due at least, in part to the heavy rainfall in 1960 which would have the effect of dissolving sulphur gases and hence decreasing the amount of these gases collected upon the absorbing peroxide surface. Heavy rainfall is, therefore, not without some beneficial effects!

The data for the Kingswood area are similarly summarised.

**Table 20**

	1954	1955	1956	1957	1958	1959	1960
Tons per sq. mile ..	183	116	109	78	88	100	95
Average SO <sub>3</sub> mgms. per 100 sq. cm. per day ..	0.94	1.82	1.24	1.02	0.89	0.8	0.5
Rainfall in inches ..	40.9	19.9	22.7	27.6	30.0	28.0	36.3

The total deposition shows some improvement on the 1959 figures and the sulphur pollution is at the lowest level for the seven years under review. As indicated in the Bristol Survey it is highly probable that the heavy rainfall accounts at least, in part for the vast improvement so far as sulphur dioxide pollution is concerned.

#### *The Avonmouth Survey*

**Table 21**

	SO <sub>3</sub> mgms. per 100 sq. cm. per day					
	1955	1956	1957	1958	1959	1960
Avonmouth Docks ..	..	3.60	3.22	2.12	1.95	2.20
Green Splot ..	..	1.16	1.21	1.81	1.18	1.17
*Barracks Lane ..	..	0.71	1.12	0.97	0.91	0.65

\*Prior to April 1957 this site was at T. Farm.

The level of sulphur pollution in the area is at its lowest for the six years under review with the best improvement noted at the Barracks Lane site where pollution is about half the 1959 figure and only one-third of the 1958 level.

The rain gauges at Avonmouth Dock and Barracks Lane are not examined in the conventional manner but are used to assess the zinc and fluorine pollution in the area. No attempt is made to determine the actual form of these depositions and the table below gives the total zinc and its compounds, and the total fluorine and its compounds respectively.

**Table 22**

	1957	1958	1959	Tons per sq. mile		1960	1960
				1957	1958		
Avonmouth Dock							
Total zinc	..	..	2·13	1·82	3·14	1·69 (10 mths.)	2·03
Total fluorine	..	..	0·95	1·09	1·50	1·08 (10 mths.)	1·30
Rainfall in inches	..	..	28·9	33·1	32·0	27·7 (10 mths.)	33·2

**Barracks Lane**

Total zinc	..	..	0·34	0·31	0·28	0·31
Total fluorine	..	..	0·31	0·19	0·22	0·27
Rainfall in inches	..	..	29·4	29·4	29·8	40·0

The Barracks Lane figures indicate a more or less stabilised picture at 0·3 tons of zinc and 0·25 tons of fluorine per sq. mile, whatever the rainfall. At the Dock site conditions are more variable. In 1960 the data indicate a reversion to the 1957 and 1958 levels and there is a considerable improvement over the rather high figures recorded in 1959.

*The Dursley Survey*

The Council Office site was operative throughout the year but the Street Farm site was abandoned at the end of the 1st quarter.

**Table 23**

	Average SO <sub>3</sub> mgms. per 100 sq. cm. per day						
	1960	1959	1958	1957	1956		
Street Farm ..	..	..	0·74 (3 mths.)	0·55	0·49	0·81	0·85
Council Offices ..	..	..	0·45	0·53	0·75	0·93	1·07
Rainfall in inches for each year							
Street Farm ..	..	..	7·34 (3 mths.)	32·0	33·9	28·6	24·6 (11 mths.)
Council Offices ..	..	..	37·7	32·8	34·9	26·9	24·6
Deposit in tons per sq. mile							
Street Farm ..	..	..	23·2 (3 mths.)	86·6	71·7	59·8	73·2
Council Offices ..	..	..	104·5 (11 mths.)	78·0	81·7	59·0	94·0

It is obviously unreasonable to include the three months survey at Street Farm in any comparison with previous years.

The level of sulphur pollution at the Council Offices continues to improve and the figure of 0·45 is the lowest yearly average since 1956. The rainfall is the highest recorded for the five years of the survey and the total deposit of 104·5 tons for the year is the highest for the same period with three months January, October and November accounting for just over 36 tons. The rainfall figures ranged from 1·16 inches in April to 5·18 inches in October. The rainfall in July, August, October and November was 4·50, 4·66, 5·18 and 4·96 inches respectively.

*The Stroud Survey*

The Gaumont Cinema and Girls' High School sites gave the following data for the year and this is compared with earlier years.

**Table 24**

		Average $SO_3$ mgms. per 100 sq. cm. per day				
		1960	1959	1958	1957	1956
Gaumont Cinema	..	0.77	0.88	1.32	1.41	0.81
Girls' High School	..	0.54	0.67	0.76	0.95	1.21
Rainfall in inches for each year						
		1960	1959	1958	1957	1956
Gaumont Cinema	..	40.4	28.6	34.6	27.9	24.1
Girls' High School	..	38.4	28.9	31.7	26.7	23.0
Deposit in tons per sq. mile						
		1960	1959	1958	1957	1956
Gaumont Cinema	..	145.5	126.1	154.9	115.9	171.7
Girls' High School	..	94.3	68.9*	74.5	60.5	82.2

\* for the period of 11 months.

The average degree of sulphur pollution shows the lowest values for the five years under review, whilst the rainfall was at its highest. There is undoubtedly some correlation of these factors. In other words the sulphur pollution will tend to fall as deposition of rain increases a state of affairs which is predictable in view of the solubility of sulphur gases in water.

The deposit at both sides has increased as compared with 1959.

The deposition at the Cinema site has increased by about 19 tons, whilst at the Girls' School conditions have worsened from 75 tons to 94 tons, taking due notice of the 11 months observations in that year. The conditions at the two sites ranged from 2.79 tons (rainfall 2.96 inches) in September to 13.71 tons (rainfall 4.15 inches) in November at the Girls' High School, whilst at the Cinema site it was 6.83 tons (rainfall 3.47 inches) in September to 19.29 tons (rainfall 4.76 inches) in November.

*The Thornbury Survey*

The Walning and Brynleaze Farm sites gave the following results:—

**Table 25**

		Average $SO_3$ mgms. per 100 sq. cm. per day		
		1958	1959	1960
Walning Farm	..	0.61 (10 mths.)	0.41	0.47
Brynleaze Farm	..	0.71 (10 mths.)	0.57	0.49
Deposit in tons per sq. mile				
		1958	1959	1960
Walning Farm	..	62.2 (9 mths.)	80.6 (11 mths.)	99.8
Brynleaze Farm	..	51.8	68.5 (9 mths.)	76.5 (11 mths.)
Rainfall in inches				
		1958	1959	1960
Walning Farm	..	28.8 (9 mths.)	31.9 (12 mths.)	37.1
Brynleaze Farm	..	17.6	22.9 (9 mths.)	29.3 (11 mths.)

As far as sulphur pollution is concerned the level at Brynleaze continues to fall and conditions appear to be improving. At Walning there is a slight retrogression over 1959 conditions.

There is a slight worsening of the deposition figures at both sites as compared with 1959 conditions. Rainfall at both sites was much heavier and it is intriguing to note that there is a surprising difference of the order of 4 to 5 inches in the deposition. In 1958, 1959 and 1960 there was much more rain at the Walning site.

*The Gloucester Survey*

**Table 26**

<i>Deposit in tons per sq. mile</i>			
	1958	1959	1960
The Lannet .. ..	138	79	107·0
Technical College .. ..	93 (11 mths.)	107	115·6
<i>Average SO<sub>3</sub> mgms. per 100 sq. cm. per day</i>			
	1958	1959	1960
The Lannet .. ..	109 (11 mths.)	0·96	0·72
Technical College .. ..	1·31	1·04	1·04
<i>Rainfall in inches</i>			
	1958	1959	1960
The Lannet .. ..	29·2	21·0 (11 mths.)	28·0
Technical College .. ..	26·7 (11 mths.)	26·4	31·1

There is a continuing improvement in the sulphur pollution level at the Lannet site, whilst at the Technical College the level is the same as in 1959 and markedly better than 1958. In both cases the improvement is mainly due to the higher rainfall. Even so the rainfall in Gloucester City remains the lowest of all the sites under our jurisdiction. In the generally poor weather year of 1960 the rainfall in the City was not noticeably above average although mainly concentrated in the last four months of the year.

The deposit figures at the Lannet site rose significantly in the year as compared with 1959, but were noticeably better than 1958. At the Technical College there was a worsening by some 8 tons per sq. mile over the levels for the two previous years.

Particularly heavy deposits were noted in the Technical College site in June (19 tons), October (12·4 tons), and November (12·0 tons). That is 43 tons of the year's total of 115 tons inside 3 months. At the Lannet site there were 16 tons in January and 13·3 tons in May and 10 tons in November. That is 29 tons of the year's 107 tons.

Finally mention must be made of the "rural" site at Church Road, Heywood, Wilts. Here as might be anticipated the deposition of 75 tons in the year was the lowest deposit gauge figure of all the sites. Even so this is a worsening from the 54·5 tons in 1959. In 1960 the rainfall was 36 inches compared with 25·9 inches for the eleven months in 1959.

## PART X. SPECTROSCOPY

The section has handled 912 samples during the year, 710 of which were routine examinations of canned food for lead and tin content, 89 were ice lollies examined for metallic contamination and pH, 42 were toxicological and the remaining 71 of a miscellaneous nature. Contamination by lead is still found in those makes of corned beef where the square can with a round soldered seal in the lid is used, but otherwise the food examined is almost all free from undue metallic contamination. The 42 toxicological examinations consisted of two for selenium, eight for mercury and thirty-three for lead, one sample being examined for both lead and mercury. A number of the 71 miscellaneous were examinations for copper and the rest were identifications of an unknown. The spectrographic method for copper is now in working order but it is hoped to do a little more work on interference by other elements before it is completed. Canned fish from Pacific waters is still monitored for radioactivity and the results are all negative. Work on the determination of colouring matter in foods has been extended this year; it is interesting to note that no prohibited colours have been found although some red colourings have been misnamed cochineal.

## PART XI. OTHER ACTIVITIES

A search through the year's diary brings to light many interesting events and with it a realisation that an Analyst's life is certainly not all analysis.

Thus no less than 22 lectures were given to a number of organisations and students. These included the Royal College of Midwives, two lectures, one in Bath and one in Clifton, three lectures to Meat and Other Food Inspectors, 8 lectures to D.P.H. students, three lectures to students qualifying for the Smoke Inspector's Certificate, and single lectures to Veterinary students; Old Age Pensioners at Ashton Gate; Women's Institutes in the Dursley area; the Bristol International Club; the Bristol Mothercraft Club and the prisoners at Falfield.

Various members of the staff were on the "receiving end" for lectures on a variety of subjects including Sewage Disposal and Trade Effluent Treatment; The Royal Society of Health Conference on the Cleanliness of Bathing Beaches; the Clean Air Council Annual Conference at Bath; Two R.S.H. sessional conferences in Bristol and also in Torquay; the Standing Conference on Atmospheric Pollution with meetings in London and Stevenage and several other visits to give technical advice mainly on water and sewage problems. Mr. Taylor and I also attended series of seven Friday lectures on Radiochemistry which included both theory and practical work. For this opportunity and for my chance to attend the Pure Food Centenary Lectures in London in September, I would express my thanks to the Health Committee.

Interest in Civil Defence was maintained throughout the year and included exercises in February and March; a four day study at Sunningdale also in March on Radiation Monitoring of Foods and the Annual Conference of Scientific Intelligence Officers at Exeter in April.

There was also the usual quota of Committee work which included the four quarterly visits to Gloucester, seven meetings of the Scientific and Ancillary Services Sub-Committee and several conferences and committees with the Medical Officer of Health and Food Inspectors on matters of sampling, pesticides in food and discussions on a beryllium copper process and the setting up of some ten stations located in schools in the City area for a survey of smoke and sulphur dioxide pollution.

We were pleased to welcome to the laboratory several visitors including Dr. and Mrs. A. Serigo from Madrid; Dr. D. Riston from Chile, Messrs M. P. Camilleri and Scerri, Public Health Inspectors from Malta and Dr. Hassan Kushkush from Khartoum; Miss Toler (D.S.I.R.), and Dr. Cookson, M.O.H. Gloucester City. Several parties also toured the laboratories including pupils from Redland Hill House, Veterinary, D.P.H. and Public Health Students.

Several Court actions were taken during the year and included the following with brief details of the outcome.

- May Three milk samples with added water ranging from 5 to 9 per cent. This case was held at Coleford and a plea of guilty was entered. A fine of £15 and £3 3s. 9d. costs was imposed.
- July Razor blades in a bottle of Coca Cola. This was indeed a most interesting case and involved a whole day at Tewkesbury. A plea of not guilty was entered but the manufacturers were eventually fined £10 and £113 costs.
- Sept. A milk found to be 31·7 per cent deficient in fat. This case was heard at Dursley. A plea of guilty was entered and a fine of £5 and £5 costs was imposed.
- Dec. Sample M.150 Petrol submitted by the Fire Brigade. The sample was demonstrated to be petrol with the meaning of the Petroleum Regulations. The vendor was summoned for keeping petroleum spirit without a licence. A plea of guilty was entered and the two persons concerned were each fined £4.

In several other instances cautions were issued and in some cases involving foods and drugs the articles were withdrawn from sale.

On the purely consultative aspects of the work many enquiries were made notably from the Docks Office on a variety of goods entering or due to enter the Port. These included Plasticised Nitro-cellulose Flakes with not less than 18 per cent of dibutyl phthalate, Nitrocellulose Chips with plasticisers, Aromatic solvents of various types, and "Methanol Hydro-peroxide".

Other enquiries concerned gas leaks, the seizure of a diesel engine, illicit sheep dipping in arsenical dips, the spraying of mushrooms with Lindex and/or Murphane. It is understood that Lindex is applied as a 5 per cent spray or dust and is B.H.C. The Ministry of Agricultural regulations require a 14-day interval between use and marketing crops. Murphane is zinc-ethylene-bis-dithio-carbonate and is used against bacterial spot and other diseases.

Finally I must refer to the work of the Standards Committee of the Association of Public Analysts. I had the honour to be re-appointed as Chairman and this Committee continues to do much valuable work in the formulation of Standards, Codes of Practice and allied matters. The year also saw the formation of the Local Authorities Joint Advisory Committee on Food Standards. At the first meeting in June discussions were conducted on a number of commodities and A.P.A. members were empowered to conduct negotiations with appropriate Trade interests on several of these selected for priority consideration.

The formation of this Joint Advisory Committee is an important step in the food legislation of this Country and such a committee can do most valuable work in the formulation and revision of Codes of Practice, a task somewhat regrettably rejected by the Ministry of Agriculture, Fisheries and Food.

As Chairman of the major Committee of the A.P.A. on Foods I am most appreciative of all the effort that goes into the safeguarding of the nations food supplies and I do sincerely thank the Health Committee for their understanding of the value of this work and for the permission granted to me to attend meetings outside Bristol.



SECTION D

PART HEALTH SERVICES  
ANNUAL AND QUINQUENNIAL REPORT  
ON  
MEDICAL INSPECTION AND SANITARY CIRCUMSTANCES

*Dr. D. T. Richards*  
*Senior Medical Officer (Port)*

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*This Report is prepared on the lines indicated in  
Form Port 20, issued by the Ministry of Health to  
Port Health Authorities*



# PORT HEALTH SERVICES

## ANNUAL AND QUINQUENNIAL REPORT

on  
**Medical and Sanitary Circumstances**

Dr. D. T. Richards  
*Senior Medical Officer (Port)*

### SECTION I

#### Introduction

The expansion of trade at the Port of Bristol continued with undiminished activity in 1960. A total of 1,748 "foreign-going" ships, together with 6,404 coastwise vessels entered the port during the year. The net tonnage of foreign arrivals totalled 4,895,022 a figure well above the average for the post-war years. Traffic returns provided by the Port of Bristol Authority show that imports amounted to 4,007,292 tons, exceeding the previous year's peace-time record by 150,000 tons. Exports, amounting to 164,319 tons, were 9,000 tons greater than in 1959.

Throughout the year the staff of the Port Health Department maintained a careful watch over all shipping entering the port. Routine health control measures were in continuous operation throughout the twenty-four hours, often concurrently, at Avonmouth, Bristol and Portishead Docks. The provisions of the Public Health (Ships) and the Public Health (Aircraft) Regulations, 1952, were properly enforced at all times. Incoming ships were immediately boarded, inspected and kept under careful supervision whilst in port; 356 of these vessels, from ports and seaboads reporting the occurrence of one of the "quarantinable" diseases, were singled out for detailed attention. The health of more than 65,000 crew members and passengers was checked on arrival; 566 of these were discovered to be in need of medical attention. In 36 instances visits were made to vessels for the purpose of investigating sickness reported to be of an infectious nature; 14 of the cases, so ascertained, were sent to the infectious diseases hospital.

Prevention of the importation and spread of communicable diseases is unquestionably the primary function of a port service. The inspection and clearance of vessels arriving at the port must claim the unfailing attention of the port health officer. Second in importance is the systematic inspection of imported food for the purpose of assessing its purity and quality, or to discover the presence of adulterants. During 1960, 618,000 tons of imported food came under the supervision of the inspectorate; 1,690 samples of this food were taken, and submitted to the laboratory for chemical and bacteriological analysis. An outstanding feature of this work was the detection of organisms of the *salmonella* group in consignments of desiccated coconut from Ceylon. From March onward, intensive sampling of successive shipments of this commodity became necessary. As a result many *salmonella* strains were isolated and large quantities of the coconut, declared to be infected, were detained at the port. A fuller account of these investigations is given in Section XVII of this report.

Medical inspection and detailed medical examinations of incoming aliens, in accordance with the requirements of the Aliens Order, 1953, were carried out at the Seaports and at the Airport. No rejection certificates were issued during the period.

**TABLE A**

<i>Name of Officer</i>	<i>Nature of appointment</i>	<i>Date of appointment (Original)</i>	<i>Date of appointment (Present post)</i>	<i>Qualifications</i>	<i>Any other appointment held</i>
Wofinden, Dr. R. C.	Port Medical Officer	29.9.47	1.2.56	M.D., B.S., D.P.H., D.P.A.	Medical Officer of Health
Skone, Dr. J. F.	Deputy Port Medical Officer	1.10.59	1.10.59	M.D., D.P.H.	Deputy Medical Officer of Health
Richards, Dr. D. T.	Sen. Asst. Medical Officer (Port)	1.11.38	13.1.47	L.R.C.P. (Lond.) M.R.C.S. (Eng.), D.P.H.	—
Febry, Dr. G. N.	Assistant Medical Officer (Port)	20.1.58	15.6.59	M.B., Ch.B., D.P.H.	—
Tomlinson, Dr. P.	Assistant Medical Officer (Port)	New appointment 10.10.60 20.11.57	10.10.60	M.D., D.P.H.	—
Redstone, Mr. F. J.	Chief Port Health Inspector	1.9.40	1.10.43	F.R.S.H., F.A.P.H.I.	—
Davies, E. I.	Senior Port Health Inspector	13.5.37	1.11.43	Certs. of R.S.I., S.I.E.J.B., R.S.I. Meat and Other Foods; Cert. Testamur Welsh School of Medicine in Public Health and Hygiene; Master Mariner (Foreign-going)	—
Blampied, F. C.	District Public Health Inspector (Port)	1.12.48	1.1.57	Certs. of R.S.I., R.S.I. Meat and Other Foods; Smoke Inspector's Cert. R.S.I.	—
Earthrow, N. A. C.	District Public Health Inspector (Port)	1.11.37	18.11.59	Certs. of R.S.I., R.S.I. Meat and Other Foods; Master Mariner (Foreign-going)	—
Fowler, C. H.	District Public Health Inspector (Port)	1.9.57	1.9.57	Cert. R.S.I.	—
Lack, W. H. G.	District Public Health Inspector (Port)	1.9.57	1.9.57	Cert. R.S.I.; and R.S.I. Cert. in Tropical Hygiene	—
Bowen, W. T.	Assistant to Port Health Inspector	27.1.36	27.1.36	Master Mariner's Cert.	—
Baston, C. W.	Assistant to Port Health Inspector	13.2.38	13.2.38	—	—
Henley, F. C.	Senior Group Clerk	1.8.37	11.6.56	Intermediate Certificate and Part II final D.M.A.	IN ADDITION:—The following M.O.'s undertake relief duties as required: Dr. A. M. Fraser and Dr. J. E. Kaye.

On November 1st, the Food Hygiene (Docks, Carriers, etc.) Regulations, 1960, came into force. These regulations place certain obligations and responsibilities upon food handlers, port employers and persons allocating accommodation in parts of the dock to which the regulations apply. They bring the handling of imported foodstuffs into line with the provisions of the principal Regulations. A survey of the local requirements was made during November; this survey is summarized in Section XVII.

This Report is prepared, as in previous years, in the manner prescribed in Form Port 20, issued to Port Health Authorities by the Ministry of Health; but on this occasion it is in the form of a quinquennial report, giving a more detailed account of port health procedure than in the intervening years.

## SECTION II

### Amount of Shipping Entering the District During the Year

The following table provides a yearly comparison of the trading figures during the last quinquennial period.

Year	<i>Vessels normally trading</i>		<i>Tonnage of foreign</i>	
	<i>Foreign</i>	<i>Coastwise</i>	<i>Imports and Exports</i>	
1960 ..	1,748	6,404	4,007,292	164,319
1959 ..	1,703	6,743	3,856,903	155,290
1958 ..	1,814	6,611	3,840,997	132,999
1957 ..	1,563	4,334	3,421,199	94,856
1956 ..	1,442	4,855	3,607,490	126,577

## SECTION III

### Character of Shipping and Trade During the Year

This remains fairly constant in character from year to year and is adequately dealt with in tables (B) and (C) which follow.

**TABLE B****Amount of Shipping Entering the District During the Year**

<i>Ships from*</i>	<i>Number*</i>	<i>Tonnage*</i>	<i>Number inspected by the Medical Officer of Health</i>	<i>by the Health Inspector</i>	<i>No. of ships reported as having had during the voyage infectious disease on board†</i>
Foreign ports	1,748	4,895,022	356	1,819	36
Coastwise ..	6,404	1,871,150	—	942	—
Total ..	8,152	6,766,172	356	2,761	36

\* Figures supplied by courtesy of the Port of Bristol Authority. (Discrepancy between number of vessels shown as arriving and number inspected in foreign section arises from differing classification of " Foreign " and " Coastwise " vessels as applied by the Port of Bristol Authority and the Bristol Port Health Authority).

† Excluding vessels having venereal disease on board.

**TABLE C (a)****Passenger Traffic**

		<i>Seaport</i>	<i>Airport</i>
Inwards	British	1,876	1,323
	Alien	287	729
Outwards	British	793	1,411
	Alien	312	658

**TABLE C (b)****Cargo Traffic****PRINCIPAL IMPORTS**

	<i>Commodities</i>	<i>Tons</i>
Cereal Products	.. .. .. .. ..	24,368
Cocoa	.. .. .. .. ..	27,143
Coffee	.. .. .. .. ..	14,509
Feeding Stuffs for Livestock	.. .. .. .. ..	478,811
Fertilisers	.. .. .. .. ..	311,421
Fruit: Bananas	.. .. .. .. ..	41,189
Canned	.. .. .. .. ..	21,840
Dried	.. .. .. .. ..	5,149
Other kinds	.. .. .. .. ..	20,951
Grain: Barley	.. .. .. .. ..	109,606
Maize	.. .. .. .. ..	431,795
Wheat	.. .. .. .. ..	386,197
Other kinds	.. .. .. .. ..	164,822
Metals: Aluminium	.. .. .. .. ..	72,473
Copper	.. .. .. .. ..	18,555
Iron and Steel	.. .. .. .. ..	92,563
Zinc and Spelter	.. .. .. .. ..	37,951
Other kinds	.. .. .. .. ..	9,834
Molasses	.. .. .. .. ..	103,969
Oilseeds and Oilnuts	.. .. .. .. ..	59,144
Ores	.. .. .. .. ..	172,517
Paper	.. .. .. .. ..	49,300
Petroleum: Spirit	.. .. .. .. ..	271,632
Other kinds	.. .. .. .. ..	508,711
Provisions: Frozen Meat	.. .. .. .. ..	23,933
Other kinds	.. .. .. .. ..	39,039
Sugar	.. .. .. .. ..	3,945
Tea	.. .. .. .. ..	9,607
Timber	.. .. .. .. ..	166,239
Tobacco	.. .. .. .. ..	34,496
Wines and Spirits	.. .. .. .. ..	9,479
Woodpulp	.. .. .. .. ..	165,867
Other Goods	.. .. .. .. ..	120,237
Total foreign imports	..	4,007,292

**PRINCIPAL EXPORTS**

Carbon Black	.. .. .. .. ..	18,083
Chemicals	.. .. .. .. ..	4,726
Clay	.. .. .. .. ..	4,852
Cocoa and Cocoa Waste	.. .. .. .. ..	1,715
Coke	.. .. .. .. ..	37,216
Government Stores	.. .. .. .. ..	584
Metals: Iron and Steel	.. .. .. .. ..	30,451
Non-ferrous	.. .. .. .. ..	11,614
Motor Vehicles and Parts	.. .. .. .. ..	27,610
Ores	.. .. .. .. ..	2,968
Petroleum	.. .. .. .. ..	4
Strontia	.. .. .. .. ..	6,054
Timber manufactures	.. .. .. .. ..	198
Other Goods	.. .. .. .. ..	18,244
Total foreign exports	..	164,319

*Note:*—Figures supplied by the courtesy of the Port of Bristol Authority.

**TABLE C (c)**  
**Principal Ports from which Ships Arrive**

<i>Country</i>	<i>Ports</i>
Algeria .. ..	Algiers, Oran, Philippville, Mostagam.
Argentine .. ..	Buenos Aires, Bahia Blanca, Rosario, San Lorenzo, San Nicolas, San Antonio.
Australia .. ..	Adelaide, Albany, Bunbury, Brisbane, Cairns, Freemantle, Geelong, Geraldton, Melbourne, Gladstone, Port Pirie, Sydney, Townsville, Urangan, Wallaroo.
Belgium .. ..	Antwerp, Bruges, Ghent, Zeebrugge.
Brazil .. ..	Bahia, Forteza, Natal, Port Elegre, Rio de Janeiro, Recife.
British Guiana .. ..	Pointe-a-Pierre, Georgetown.
British West Indies .. ..	Antigua, Barbados, Dominica, Kingston, Montega Bay, Port Antonia, St. Kitts, Trinidad.
Bulgaria .. ..	Buges.
Burma .. ..	Rangoon.
Canada .. ..	Botwood, Halifax, Kittimat, Chemainus, Montreal, New Westminster, Port Alfred, Port Fortune, Port Churchill, Prince Rupert, Quebec, St. John, Sorel, Three Rivers, Toronto, Vancouver, Bai Comeau.
Canary Islands .. ..	Las Palmas, Teneriffe.
Ceylon .. ..	Colombo
Chile .. ..	Puntarenas, Talcahncano, Valparaiso.
Cyprus .. ..	Famagusta, Limassol, Nicosea.
Cyrenaica .. ..	Tripoli
Denmark .. ..	Copenhagen, Esburg, Frederikssund, Skagen, Thyboron.
Estonia .. ..	Tallin.
Eire .. ..	Cork, Dingle, Dublin, Foynes, Limerick, Waterford.
Fiji .. ..	Souva
Finland .. ..	Hamina, Helsingford, Kotka.
Formosa .. ..	Formosa
France .. ..	Abbeville, Bordeaux, Boulogne, Deauville, Calais, Caen, Dieppe, Dunkirk, Donger, Dahouet, Le Havre, Cherbourg, Honfleur, La Rochelle, Libourne, Marseilles, Fecamps, Nantes, Rouen, Tonmay-Charente, La Pallice.
French Cameroons .. ..	Tiko.
French West Africa .. ..	Dakar, Port Gentil.
Gambia .. ..	Bathurst.
Germany .. ..	Bremen, Bremerhaven, Emden, Friedickshaven, Hamburg, Keil, Stettin, Stralsund, Wismar.
Ghana .. ..	Accra, Takoradi.
Greece .. ..	Patras, Piraeus, Zante.
Guatamala .. ..	Le Paz.
Hawaii .. ..	Hilo
Iceland .. ..	Nodfjordur.
India .. ..	Bedi, Bombay, Bhavengar, Calcutta, Chalna, Cochin, Madras, Mangalore, Vizagapatam.
Indonesia .. ..	Djakarti, Surabaya, Tegal.
Iran .. ..	Abadan, Basra, Bahrein, Bushire, Hormuz, Mena el Ahmadi.
Israel .. ..	Haifa, Jaffa.
Italy .. ..	Bari, Genoa, Livorno, Naples, Palermo, Salerno, Spezia, Cagliari, Civitavecchia, Ravenna, Taranto, Venice.
Japan .. ..	Kobe, Yokohama, Tokio.
Jordan .. ..	Aqaba.
Kenya .. ..	Mombassa.
Libya .. ..	Benghazi.
Madras .. ..	Pondicherry.
Malaya .. ..	Penang, Singapore.
Mexico .. ..	Coatzacoalcos, Mazatlan, Tampico.
Morocco .. ..	Agadar, Ceuto, Casablanca, Saffi, Sousse.
Mozambique .. ..	Beira, Mozambique.

**TABLE C (c) continued**

<i>Country</i>	<i>Ports</i>
Netherlands .. .	Amsterdam, Deldyzi, Dordrecht, Flarrinden, Rotterdam, Spisk, Zandevoort, Zaandan, Vlaardinger.
Netherlands West Indies .. .	Aruba, Curacao.
Nigeria .. .	Lagos, Sapele, Port Harcourt, Warri.
Nauru Islands .. .	Nauru.
New Zealand .. .	Auckland, Port Chalmers, Lyttleton, Napier, Dunedin, Timaru, Wellington, New Plymouth.
Norway .. .	Aalesund, Ardalstangen, Bergen, Floro, Kopervik, Kristiansund, Oslo, Havanger, Stavenger, Svolvaer, Saandalsova, Tredstrand, Trondheim, Tronsa, Halso.
Pakistan .. .	Chittagong, Karachi.
Persian Gulf .. .	Ras Tanura.
Peru .. .	Callao, Mollendo, Materina.
Portugal .. .	Faro, Lagos, Lisbon, Oporto, Leixors, Vila Real
Portuguese East Africa .. .	Nacula, Lourenco Marques.
Puerto Rico .. .	San Juan.
Rumania .. .	Constanza, Galatz.
Poland .. .	Gdynia.
Saudi Arabia .. .	Aden.
Sierra Leone .. .	Freetown.
Siam .. .	Bangkok.
South West Africa .. .	Walvis Bay.
Spain .. .	Almeria, Barcelona, Bilboa, Cartagena, Huelva, La Vera, Tarragona, Seville, Valencia.
Sudan .. .	Port Sudan.
Sweden .. .	Gelfe, Gothenburg, Iggesund, Kramfors, Malmo, Nyhammar, Stockholm, Sundsvall.
Syria .. .	Latakia.
Tanganyika .. .	Dar-es-Salam, Lindi, Mitwara, Tanga, Zanzibar.
Tunisia .. .	Sfax, Tunis.
Turkey .. .	Iskenderon, Istanbul, Izmir, Mersia.
Uruguay .. .	Las Piedras, Puerto La Cruz, Montevideo.
Union of South Africa .. .	Cape Town, Durban, East London, Port Elizabeth.
U.S.S.R. .. .	Archangel, Leningrad, Kalingrad, Novorossik, Nikolajas.
United Arab Republic .. .	Alexandria, Port Said, Liboa.
Tasmania .. .	Hobart.
United States of America .. .	Baltimore, Baytown, Baton Rouge, Beaumont, Boston, Boco Grande, Charleston, Corpus Christi, Freeport, Galveston, Houston, Los Angeles, Mobile, New Orleans, Newport, New York, Port Arthur, Bridgeport, Philadelphia, Port Jacksonville, San Francisco, Tacoma, Tampa, Texas City, Wilmington, Chicago.
Venezuela .. .	Carpito, Punta Cardon, Caracas.
West Indies (U.S.A.) .. .	Porto Rica.
Yugoslavia .. .	Rijeka, Split, Sibenik.

## SECTION IV

### Inland Barge Traffic

*The number of craft and tonnage for  
INLAND BARGE TRAFFIC is included  
in the Coastwise Traffic by the Port of  
Bristol Authority*

Places served by the traffic:

Banbury	Newport
Barry	Sharpness
Bridgewater	Stourport
Cardiff	Swansea
Frampton	Upton
Gloucester	Worcester
Lydney	

## SECTION V

### Water Supply

#### (1) Source of supply for:—

##### (a) District

Water, supplied by the Bristol Waterworks Company, is available to all premises in the dock area.

##### (b) Shipping

Fresh water mains, carrying the Bristol Waterworks supply, are laid on to the quayside berths.

#### (2) Reports of tests for Contamination:—

##### (a) Quayside supply

During the year 34 drinking water samples were drawn from the water mains at Avonmouth, Bristol and Portishead Docks. Thirty-one of these samples were satisfactory, but three from Avonmouth Docks had a high bacterial count. Repeat samples, taken immediately afterwards from these three sources, were found to have a normal bacterial count.

##### (b) Ships' water tanks

No complaints concerning ships' drinking water supplies were received during the year.

The m.v. "Parima" reported that eight days before arrival a member of the crew, suspected to be suffering from an enteric infection, had been removed to hospital at Porto Grande, Cape Verde Islands. Although no further case of sickness had occurred, it was considered advisable to sample the drinking water on this ship, which was a mixture of supplies obtained at various Brazilian ports and at Las Palmas. The bacteriological report stated that the water, from which the *Ps. Pyocneus* was recovered, was probably from an unchlorinated source. The information was forwarded to the Port Medical Officer, Hull, to which port the vessel had proceeded. It was later learned that all drinking water tanks had been emptied and cleansed.

Routine samples of drinking water were taken from the regular traders "Sandholm" and "Ravensfield". These were reported to be quite satisfactory. Samples were also taken from the small drinking water storage tanks on the floating grain elevators "Beta" and "Calais" at Avonmouth Docks. These were also satisfactory.

#### Drinking Water Samples from Ships

Name of Ship	Result
s.s. "Parima" .. .. ..	Unsatisfactory
m.v. "Sandholme" .. .. ..	Satisfactory
m.v. "Ravensfield" .. .. ..	Satisfactory
G.E. "Beta" .. .. ..	Satisfactory
G.E. "Calais" .. .. ..	Satisfactory

#### (3) Precautions taken against Contamination of Hydrants and Hosepipes

Close attention is regularly given to the hydrant chambers, specially those on quaysides which are prone to contamination and where blockage of the outlet pipes is likely to occur. Whenever defects, or the accumulation of stagnant water, were discovered in these chambers the facts were reported to the Port Authority and were promptly dealt with. In order to prevent any possible contamination of the water supplied to ships, the watermen were frequently reminded of the need to flush the hydrants, standpipes and hoses with a considerable quantity of water before commencing to fill ship's tanks.

#### (4) Number and Sanitary condition of Water Boats

These have been discontinued at the Port of Bristol.

## SECTION VI

### Public Health (Ships) Regulations, 1952

#### (1) List of Infected Areas (Regulations) (6)

This list is prepared and brought up to date monthly. It summarises the information contained in the World Health Organisation's Weekly Epidemiological Record of Quarantinable Diseases prepared for the guidance of Port Health Authorities, and is regularly circulated as follows, any important addition or amendment being subsequently forwarded during the month as a separate memorandum:—

H.M. Customs and Excise (Seaport and Airport)  
H.M. Immigration Officer (Seaport and Airport)  
The Haven Master (for distribution to pilots)  
The Manager, Lulsgate (Bristol Airport)  
Medical Officers, Shipping Federation  
Medical Officers, Special Treatment Centres  
The Docks Superintendent  
Waterguard Superintendent  
Pilotage Collector, Pill

#### (2) Radio Messages

- (a) Arrangements for sending permission by radio for ships to enter the District (Regulation 13)
- (b) Arrangements for receiving messages by radio from ships and for acting thereon (Regulation 14 (1) (a) and (2))

If there are any circumstances on board requiring the attention of the Medical Officer, a wireless message is relayed to "Portelth" Bristol, via Burnham-on-Sea Radio or Lands End Radio, giving the necessary details. These messages are forwarded from the Central Health Clinic to the Port Medical Officer and Senior Port Health Inspector for appropriate action.

#### (3) Notifications otherwise than by Radio (Regulation 14) (1) (b)

Arrangements for receiving notification otherwise than by radio and for acting thereon

Visual signals for transmission to the Port Medical Officer are in certain cases directed to the Port Authority's signal station at Walton Bay and then telephoned to Port Health Officials.

#### (4) Mooring Stations (Regulations 22 to 30)

Situation of stations, and any standing directions issued under these Regulations

- (a) Inner mooring stations
  - (i) Royal Edward Dock—North Wall
  - (ii) Old Dock—Dolphin Buoy
  - (iii) Bristol—Railway Wharf
- (b) Outer mooring station  
Avonmouth, Bristol and Portishead Docks—Walton Bay.

All vessels, coastwise or from foreign ports, are boarded at the docks on arrival by the Health Inspector on tidal watch. All vessels from infected foreign ports, all vessels reporting sickness, and all vessels requiring measures to be taken under the Aliens' Order, are boarded by the Medical Officer. Vessels reporting sickness suspected to be infectious in nature are boarded by the Medical Officer and Health Inspector at Walton Bay from a tug chartered for this purpose. For these reasons no standing directions have been issued under the Regulations.

(5) *Arrangements for:—*

(a) *Hospital accommodation for infectious disease (other than smallpox)*

Patients suffering from infectious disease, and all cases requiring observation are removed to the isolation hospital at Ham Green.

(b) *Surveillance and follow-up of contacts*

Inspectors make daily visits to all vessels in port which have arrived from or called at infected areas and secure a signed report concerning the health of the crews from the officer-in-charge. Any sickness developing after arrival is thus brought immediately to the notice of the Medical Officer. On arrival the destinations of passengers and crew are also obtained as a routine in respect of these ships. When surveillance is required, forward notices, giving the appropriate information, are posted to the Medical Officers of Health of the districts to which contacts proceed after leaving the ship.

(c) *Cleansing and disinfection of ships, persons, clothing and other articles*

The cleansing and disinfection of infected ships' quarters is carried out whenever necessary, under the supervision of the inspectorial staff. Clothing, bedding and other articles are removed by van and treated by steam under pressure at the City Disinfecting Station. The cleansing of persons is provided for by the City Cleansing Station.

## SECTION VII

### Smallpox

1. Cases and suspected cases of smallpox occurring within the district are sent to the smallpox wing of the Ham Green Hospital, Pill near Bristol.

2. Ambulance facilities are provided by the Ambulance Service of the Bristol Corporation, which is administered by the Medical Officer of Health. The vaccinal state of the ambulance crews is satisfactory and subject to continuous review.

3. One consultant is available in the event of smallpox; he is Dr. J. Macrea, of the Ham Green Hospital, Pill near Bristol.

4. Facilities for the laboratory diagnosis of smallpox are available in conjunction with the Public Health Laboratory Service.

## SECTION VIII

### Venereal Disease

A new clinic for the treatment of venereal disease amongst seamen is in the course of construction at Avonmouth Dock. It is expected to be opened early in 1961.

Full information concerning the situation, and giving the hours during which the Medical Officer is in attendance at the venereal disease centres at Avonmouth and Bristol Docks, is given to the crew of every vessel entering the port. Diagnostic facilities and treatment are available throughout the day and during the forenoon of Sundays and public holidays. This information is contained in handbills (including a sketch map) which are freely distributed to each ship. When indicated, in-patient treatment under the direction of the venereal diseases consultant is available at Ham Green Hospital.

The arrangement whereby the Port Medical Officer, who is usually the first to ascertain venereal conditions, acts in an additional capacity as Medical Officer to the venereal disease centre has continued. This arrangement has worked satisfactorily.

The following table related to seamen treated at the Avonmouth and Bristol Centres during the past five years:—

<i>Year</i>	<i>Syphilis</i>	<i>Chancroid</i>	<i>Lympho-granuloma</i>	<i>Gonorrhoea</i>	<i>Non V.D.</i>	<i>Total</i>
1955 .. .	41	14	3	150	339	547
1956 .. .	28	19	2	124	299	472
1957 .. .	21	15	5	133	295	469
1958 .. .	22	16	3	140	277	458
1959 .. .	32	11	11	139	302	495
1960 .. .	35	18	15	163	292	537

## SECTION IX

Table "D" which follows is self-explanatory, no other incidents of outstanding interest have occurred during the year.

**TABLE D**  
**Cases of Notifiable and Other Infectious Diseases on Ships**

<i>Category and number of cases during the year</i>	<i>Cases which have occurred on ships</i>						<i>Number of ships concerned</i>
	<i>Cases landed from ships from foreign ports</i>	<i>Cases landed from other ships</i>	<i>Total</i>	<i>Cases landed from foreign ports but have been disposed of before arrival</i>			
				<i>Pass.</i>	<i>Crew</i>	<i>Pass.</i>	<i>Crew</i>
Chicken Pox ..	.. 1	2	—	—	—	—	3 3
Dysentery ..	.. 1	—	—	—	—	—	1 1
Enteritis ..	.. —	8	—	—	—	—	8 8
Influenza ..	.. —	6	—	—	—	—	6 6
Measles ..	.. 1	—	—	—	—	—	1 1
Mumps ..	.. —	—	—	1	—	—	1 1
Pneumonia ..	.. —	3	—	—	—	—	3 3
Tuberculosis (pul.) ..	.. —	3	—	—	—	—	3 3
Typhoid fever ..	.. —	1	—	1	—	—	2 2
Vaccinia ..	.. —	2	—	—	—	—	2 2
Scabies ..	.. —	7	—	—	—	—	7 6
<b>Totals</b>	<b>.. 3</b>	<b>32</b>	<b>—</b>	<b>2</b>	<b>—</b>	<b>—</b>	<b>37 36</b>

## SECTION X

No case of malaria was ascertained during the year on any vessel arriving at the port.

## SECTION XI

### Measures taken against Ships Infected with or Suspected for Plague

1. All vessels from infected or suspected ports are required to attach efficient rat guards to the mooring ropes.
2. Suitable lengths of tarred hessian are wrapped around mooring outside the leads, when the standard types of rat guards are not available.

## SECTION XII

### Measures taken against Rodents in Ships from Foreign Ports

#### I Procedure for Inspection of Ships for Rats

##### (a) Foreign-going Ships

As soon as possible after the arrival of a vessel a thorough inspection of the undisturbed surface of the cargo, the cargo holds and all available storage space is made. These are the initial stages of rodent control at the port. A daily search then follows, together with trapping when considered necessary.

Further action is dependent upon the estimated degree of infestation, this being based upon the evidence of activity discovered and the number of rats trapped during the first few days. If a vessel is found to have moderate or pronounced infestation and is completing discharge of cargo at this port, the owner or the master in the case of a foreign-owned ship is advised of the need to have the vessel de-ratted upon completion of discharge. When the vessel is proceeding to another port for completion of discharge of cargo the relevant information is forwarded to the Port Health Authority concerned.

The above measures of inspection and repression were effectively maintained throughout the year, and our experiences confirm the impression, implied in previous annual reports, that the vast majority of cargo ships are now more or less free from rodent infestation. The figures given in the accompanying table illustrate this very well.

This is an encouraging trend, but it does not justify an attitude of complacency. Standards in the various ports of the world vary considerably, and it is advisable to be prepared for the unexpected and to assume that the next ship to arrive may well be infested with rats. This happened at the port during 1960.

Within a comparatively short period of time, three vessels arrived from River Plate ports with cargoes of bulk grain and bagged provender. They were the "Achaean", the "Kori" and the "Kapitan Kostis".

The "Achaean", which was the first to arrive, is a modern, well maintained ship with very slight rat harbourage in the cargo holds, and at the time of arrival possessed a Deratting Exemption Certificate which was valid for a further two months.

Signs of moderate to pronounced rat activity were discovered in the hold and eighteen rats were caught after traps had been set for one night. The owners were advised, and fumigation with *HCN* gas was recommended after completion of the discharge of the cargo at Cork.

The Port Medical Officer of Cork was informed of the facts but he was unable to persuade the owners to fumigate, and the vessel sailed from Cork to the Argentine for the same type of cargo without any treatment. When the vessel arrived at Avonmouth on the second occasion, *having in the meantime been provided with a new Deratting Exemption Certificate in Rosario*, the rat infestation was much more pronounced and had spread to the saloon accommodation.

Altogether, 25 adults and 36 young rats were destroyed whilst part of the cargo was being unloaded at Avonmouth. The young rats were recovered from seven nests in the bagged meal. Soon afterwards, upon completion of discharge at Cork, the vessel was treated throughout with *HCN* gas and the formidable total of 214 dead rats were recovered.

From the foregoing it will be noted that in a period of about three months nearly 300 rats were killed in this ship.

The next to arrive was the "Kapitan Kostis". This vessel also had a valid Deratting Exemption Certificate issued three months previously. It was soon established that rat activity was pronounced in all cargo holds and 85 adult together with 138 young rats, found in eighteen nests, were killed whilst the cargo was being unloaded.

Despite considerable discussion and persuasion the owners would not agree to a fumigation of the vessel with *HCN* gas. In a final effort on our part they consented to the treatment of the holds and stores with *sodium fluor-acetate* baits. A total of 223 baits were laid and 63 poisoned rats were recovered. In all, 286 rats were killed, but it is considered that far better results would have been achieved if fumigation with *HCN* gas had been carried out.

The last of the three vessels, the "Kori", also had a Deratting Exemption Certificate which was valid for a further three months. There was ample evidence of rat activity from the outset and a total of 95 rats were destroyed, 32 adults and 63 young rats, found in 10 nests. The vessel proceeded to Glasgow. It was learned that fumigation was carried out at that port, but we were not informed of the results obtained.

From what has been described it is apparent that:—

- (1) Measures of rodent control are far from satisfactory in some foreign ports.
- (2) Deratting Exemption Certificates are being issued without adequate inspection in certain of these ports.
- (3) Port Health Authorities cannot legally enforce appropriate treatment in the case of infested ships which possess valid certificates, despite well founded evidence that these certificates may have been wrongfully issued.

Information concerning these three ships was sent to the Ministry of Health. From enquiries made at other ports the Ministry was able to ascertain that instances of heavy rat infestation in ships from ports in the Argentine were infrequent, and it was concluded that no special action was required at this stage.

During the year a number of ships trading regularly with the port have installed permanent Warfarin bait boxes at suitable points in stores and cargo holds. This method or repression is proving to be highly successful; ships officers are showing added interest by ensuring that the boxes are regularly replenished with bait.

#### *(b) Coastwise Vessels*

These vessels present no problem. Only very slight traces of mice were found in three of the numerous coastwise vessels inspected during the year. Rodent control certificates were issued on two occasions during 1960.

#### *(c) Inland Water Craft*

The barges, tugs and dredgers have been quite free from rats, and attention was concentrated on the grain elevators, all of which are now fitted with permanent bait boxes containing Warfarin which is replenished as required. In this way the rats were kept at a satisfactory minimum despite the fact that from time to time there was a temporary increase in activity immediately after the elevators had been used to discharge bulk grain from rat infested ships.

### *II Progress of Rat Proofing on Ships*

This has received its due share of attention in the design of all newly constructed ships. Throughout the year proofing has been found to be adequate in vessels inspected at the port, most of which have been of recent construction.

*III Arrangements for the Bacteriological or Pathological Examination of Rodents, with Special Reference to Rodent Plague, including the number of Rodents sent for Examination during the Year*

A routine proportion of all rats recovered is sent for examination for evidence of *B. pestis* to the Public Health Laboratory Service, Canyng Hall, Clifton. During the year, 126 ship rats were sent for post examination. All were reported to be free from plague.

*IV Arrangements in the District for De-ratting Ships, the methods used, and, if done by a Commercial Contractor, the Name of the Contractor*

The deratting of ships is done by commercial contractors who use hydrogen cyanide gas for the purpose. The undermentioned firm carried out this work at the Port during 1960:—

The London Fumigation Co. Ltd., London

**TABLE E**  
**Rodents Destroyed during the Year in Ships from Foreign Ports**

Category	Number
Black rats .. ..	556
Brown rats .. ..	—
Species not known .. ..	—
Sent for examination .. ..	126
Infected with plague .. ..	—
Mice .. ..	—

**TABLE F**  
**Deratting Certificates and Deratting Exemption Certificates Issued during the year for Ships from Foreign Ports**

After fumigation with H.C.N.	No. of Deratting Certificates issued			Total Certificates issued
	After Other fumigant	After trapping	After poisoning	
2	—	—	3	5
				178

**TABLE G**  
**Inspection of Ships for Nuisances**

Nature of defects and inspections	No. of inspections carried out	Notices served			No. of defects found	Result of serving notices	
		Statutory	In-formal	Forward (PHAs/M.O.T.)		No. of defects	Remedied
Original construction					1	—	—
Structural wear and tear					77	46	31
Dirt, vermin, etc.					304	246	58
	3,780	2	148	16	382	292	90

**Summary of Rodent Activity found in Foreign-going Ships  
for the Five Year Period 1956—1960 (inclusive)**

YEAR	1960			1959			1958			1957			1956			Five Year Period GRAND TOTAL		
	Rats per Ship	Total Rats Destroyed	No. of Ships	Total Rats Destroyed	No. of Ships													
1 to 5	7	3	12	7	31	10	13	4	39	12	102	36						
6 to 10	28	4	34	3	—	—	23	3	38	4	123	14						
11 to 15	13	1	12	1	—	—	23	2	23	2	71	6						
16 to 20	35	2	17	1	35	2	18	1	19	1	124	7						
21 to 25	—	—	22	1	25	1	—	—	—	47	2	94	4					
26 to 30	—	—	—	—	—	—	29	1	—	—	29	1						
31 to 35	31	1	33	1	—	—	34	1	33	1	131	4						
35 and over	442	3	—	—	37	1	69	1	61	1	609	6						
Totals	556	14	130	14	128	14	209	13	260	23	1,283	78						

## SECTION XIII

### Inspection of Ships for Nuisances

The majority of the ships visited during the year were either new or of recent construction. In consequence the number of dirt and vermin nuisances, structural or "wear and tear" defects discovered was small.

#### (1) Structural Defects

These were found in only one ship, a 38 years old coastwise vessel, and were so widespread that the Ministry of Transport Surveyor detained the vessel for certain essential repairs to be carried out before permitting it to depart for another port for a general survey and overhaul.

#### (2) Wear and Tear Defects

These were found in 40 British ships and in the ships of 5 other nationalities. They were either remedied at this port or included in the voyage repair list for attention at a terminal repair port.

#### (3) Dirt, Vermin and Other Nuisances

Of the 304 nuisances ascertained, 51 were smoke nuisances, referred to elsewhere in this report.

##### (a) Insect vermin

Bed bug infestation was discovered in two British and two foreign owned ships. The former were treated with insecticidal lacquer, which appeared to be quite effective. The latter were treated with BHC liquid insecticide under the supervision of a port health inspector.

Pronounced cockroach infestation was found in only five ships. Three of these were treated at this port, the other two being later disinfested at Antwerp. There is some evidence to suggest that an immunity is being acquired by these insects to the insecticidal lacquer which has in the past proved to be so effective.

Storeroom infestations, commonly due to the "flour", "grain" or "saw-tooth" variety of beetle, were concentrated mainly in supplies of flour, rice and farinaceous foods.

Rejected infested foods, landed at the request of the Ministry of Transport Ships' Stores Inspector were either surrendered for destruction, or utilized under guarantee as animal food.

##### (b) Ships Refuse

Accumulations of ships' refuse on deck, usually in disused oil drums, was most prevalent in foreign owned ships. In many cases the excuse put forward was that the crew were entitled to demand extra pay for work not carried out upon the ship, nevertheless removal of this refuse to the quayside refuse bays was compelled in all cases.

#### *Smoke Nuisance*

Formal notices, concerning offences caused through excessive *black* smoke emission were served on two ships during the year. In each case it was claimed by the Chief Engineer that the emissions were solely due to an unforeseen breakdown of the machinery controlling the oil supply to the furnaces. Investigations confirmed this. It was therefore decided to take no further legal action.

It was necessary to give 51 oral warnings concerning excessive *dark* smoke emission. This is a considerable improvement upon the figure for 1959. In most of the ships an oral warning was effective and there were no recurrences. The principal reasons were:—

Want of attention .. .	..	..	..	43
Loss of forced draught due to breakdown of fans ..	..	..	..	3
Excessive load on boilers .. .	..	..	..	2
Bad coal .. .	..	..	..	1
Oil fuel contaminated with ammonium sulphate ..	..	..	..	1
Natural draught oil-fired auxilliary boilers in a diesel engined vessel .. .	..	..	..	1

In the last mentioned case, lack of maintenance of the oil pumps and the absence of thermometers to record the oil temperature were important contributory factors. This vessel had been the cause of considerable concern to the Hull Port Authority some months earlier, and its impending arrival was therefore viewed with some disquietude. Fortunately, it was not necessary to use winches for the discharge of cargo at Avonmouth, as it had been in Hull. Consequently, the boiler load would be very much reduced, steam being required for auxiliaries, such as pumps and dynamo only. In view of this the Chief Engineer was asked to try and maintain steam with only one furnace firing. He was at first doubtful but later became satisfied that sufficient steam pressure could be maintained by this method. The smoke, although continuous, now rarely exceeded in density shade 2, on the Ringelmann Chart. At our request, the oil feed pump was overhauled and new oil temperature recording thermometers were installed.

Three new diesel driven tugs were brought into operation at the docks during the year. They replace older, coal-fired tugs, and make an important contribution to the abatement of smoke at the port.

### Hygiene of Crews' Spaces Vessels Trading Coastwise and Foreign

No. of revisits to vessels in dock by Inspectors .. .	British			Foreign			<i>Totals</i>
	<i>s.s.</i>	<i>m.v.</i>	<i>s.s.</i>	<i>m.v.</i>			
503 .. .	1,539	369	1,369				3,780
72 .. .	83	29	45				229
58 .. .	65	26	36				185

DEFECTS	No. of Ships Inspected	Original Construction		Wear and Tear		Dirt and vermin	
		No. of Ships	No. of defects	No. of Ships	No. of defects	No. of Ships	No. of defects
Nationality							
British s.s.	277	—	—	18	28	64	95
m.v.	1,235	1	1	22	44	75	120
Foreign s.s.	227	—	—	2	2	27	29
m.v.	1,022	—	—	3	3	41	60
Totals	2,761	1	1	45	77	207	304

DEFECTS	No. of Defects			No. of Defects reported by Forward Notices, etc., to:—				<i>No. of Ships</i>
	Found	Rem'd	Not Rem'd	Other PHAs.	M.O.T. Surv'r	Master	Bri- tish	
<i>NATURE</i>								
Original construction .. .	1	—	1	1	—	1	1	—
Wear and tear .. .	77	46	31	2	—	73	40	5
Dirt, vermin and other causes .. .	304	246	58	13	—	180	139	68
Totals .. .	382	292	90	16	—	254	180	73

## Summary of Defects and other Nuisances on Ships

### Wear and Tear Defects

<i>Nature of Defect</i>		<i>No. found</i>	<i>No. Remedied</i>	<i>No. Not Remedied</i>
Defective waste pipes	.. ..	9	4	5
,, soil pipes	.. ..	11	8	3
,, W.C. pans	.. ..	7	5	2
,, side scuttles	.. ..	5	2	3
,, heaters	.. ..	5	3	2
,, shower fittings	.. ..	1	—	1
,, floor drainage	.. ..	2	1	1
,, floors	.. ..	4	2	2
,, Calorifiers	.. ..	7	3	4
,, washbasins	.. ..	6	3	3
,, messroom fittings	.. ..	1	1	—
,, galley	.. ..	5	2	—
Leaking deck heads	.. ..	5	3	2
Blocked scuppers	.. ..	7	7	—
Defective cabin doors	.. ..	2	2	31
		77	46	31

### Other nuisances

<i>Nature of defect</i>		<i>No. found</i>	<i>No. Remedied</i>	<i>No. Not Remedied</i>
Cockroach infestation	.. ..	52	23	29
Bug Infestations	.. ..	4	1	3
Weevil Infestation, stores	.. ..	17	7	10
Dirty accommodation	.. ..	36	20	16
Accumulation of refuse	.. ..	51	51	—
Quayside fouling	.. ..	44	44	—
Dirty galleys	.. ..	10	10	—
,, galley fittings	.. ..	12	12	—
,, pantries	.. ..	6	6	—
,, pantry fittings	.. ..	8	8	—
,, storerooms	.. ..	5	5	—
,, refrigerated rooms	.. ..	4	4	—
,, Handling rooms	.. ..	4	4	—
Smoke nuisances	.. ..	51	51	—
		304	246	58
Overall Totals	.. ..	381	292	89

## SECTION XIV

### Public Health (Shell Fish) Regulations 1934 and 1948

There are no shell-fish beds or layings within the jurisdiction of the Bristol Port Health Authority. The supply of shell-fish marketed in Bristol is obtained from other sources.

## SECTION XV

### 1. *List of Medical Inspectors of Aliens Holding Warrants of Appointment*

Dr. R. C. Wofinden, Medical Officer of Health

Dr. J. F. Skone, Deputy Medical Officer of Health

Dr. D. T. Richards, Senior Assistant Medical Officer (Port)

Dr. G. N. Febry, Assistant Medical Officer (Port) (Until 10.10.60)

Dr. P. Tomlinson, Assistant Medical Officer (Port) (From 10.10.60)

Dr. A. Fraser, Assistant Medical Officer

Dr. J. E. Kaye, Assistant Medical Officer

### 2. *Other Staff—Nil.*

### 3. *Organisation of Work*

The Medical Examination of aliens is normally carried out at the time when a ship or an aircraft is visited for health control purposes. In all other cases the Medical Inspector is summoned to the airport or seaport at the request of the Immigration Officer who meets the arriving alien, and for this purpose a rota of Medical Inspectors is available.

### 4. *Accommodation for Medical Inspector and Examination*

When convenient, inspection and examination is carried out on board ship, by arrangement with the master. If this is not possible, or if a detailed examination is required, adequate accommodation is available in the medical inspection room of the Port Health Office, or at the Bristol (Lulsgate) Airport.

**Medical Inspection of Aliens**  
**Annual Return of the Medical Inspector of Aliens for 1960**

	SEAPORT			AIRPORT		
	Total	No. inspected by Medical Inspector	No. subjected to detailed examination by the Medical Inspector	No. of Certificates issued	Total	No. inspected by Medical Inspector
(a) Total number of aliens landing at the Port .. .. ..	275	54	5	—	729	69
(b) Aliens refused permission to land by Immigration Officer .. ..	12	—	—	—	—	—
(c) Total aliens arriving at the Port	287	54	5	—	729	69
						2
						—
Total number of vessels/aircraft carrying alien passengers ..	INWARDS	Seaport	Airport	Seaport	Airport	139
Number of vessels/aircraft dealt with by the Medical Inspector		141	132	130	—	—
						—
	OUTWARDS	141	132	—	—	—

## SECTION XVI

### Arrangements for Burial on Shore of Persons who have Died on Board Ship from Infectious Disease

The Council of the City and County of Bristol is also the Port Health Authority for the district. The ambulance and mortuary facilities of the City are therefore available for the conveyance and detention prior to shore burial of persons who have died on board ship from infectious disease.

## SECTION XVII

### Other Matters

#### 1. Imported Foods

The quantity of food imported during the year was 618,000 tons—17,000 tons more than in 1959. Compared with the previous year, imports of coffee rose by 7,500 tons and cocoa by 7,000 tons. The increase in shipments of tea and frozen meat advanced by 4,000 tons and 2,500 tons respectively. All food shipments discharged at the port during the year were inspected and sampled.

#### *Sampling*

A total of 1,690 samples were taken during the period; 701 of these were samples of desiccated coconut, referred to in some detail below. The remaining 989 samples were from diverse food products, only a few of which were found to be chemically or bacteriologically unsatisfactory:

- (a) The tin content in American asparagus and beans, and in Australian canned stewed steak, was found to approach the permitted limit of 250 parts per million. In each case the merchants were advised to arrange for early disposal.
- (b) Samples of Australian skimmed milk powder, although suitable for consumption, had rather high free acidity figures. The importers were informed of the need for prompt release to the trade and early use.
- (c) Sampled cans of Spanish fruit salad yielded a scanty growth of yeasts. This consignment included a high percentage of "springer" or "blown" tins. A full examination was carried out, the sound tins being released for early distribution.
- (d) A scanty growth of aerobic rod forming bacilli was obtained from samples of Argentine canned meat. Repeat samples were all found to be sterile.
- (e) A fairly high lead content was discovered in tins of Argentine corned beef, due to careless soldering. The canner's representative was informed and subsequent samples have shown an improvement. These soldered cans are rapidly being replaced by cans sealed with sanitary caps.

*Desiccated Coconut*

The transmission of *salmonellae* from one country to another in food products is claiming more and more attention at the ports. Early in the year the discovery of strains of this organism in imported Ceylonese desiccated coconut led to an intensification of measures for the examination and control of this commodity, which is so extensively imported for use by confectioners. With the co-operation of the importers it was decided that port health authorities should arrange for all consignments to be held for sampling at the docks and to promote a degree of uniformity at each of the ports it was recommended that sampling should be carried out as follows:—

- (i) Initially, 5% from differently marked parcels.
- (ii) If positive, repeat taking 10% samples.
- (iii) If repeat samples prove to be negative, release the consignment except for the original infected bags or cases.
- (iv) If repeat samples prove to be positive, detain the affected consignment for suitable treatment.

From March 1st when sampling began, to the end of the year, 701 samples were sent to the laboratory for bacteriological analysis. The following is a summary of the results of this investigation. (In all cases disposal of the infected packages was carried out under the supervision of a Medical Officer of Health.):

No. of consignments .....	..	..	31
No. of separate parcels (different Marks) .. ..	..	175	
No. of samples taken .. .. ..	..	701	
No. of samples positive .. .. ..	..	40	
No. of parcels where initial 5% samples were all negative .. .. ..	..	148	
No. of parcels where initial 5% samples only were positive .. .. ..	..	21	

*Disposal of individual infected packages*

Destroyed .. .. ..	..	..	2
Heat treatment (oil extraction) .. .. ..	..	..	3
Controlled heat treatment .. .. ..	..	..	16
No. of parcels where 5% and 10% samples were positive .. .. ..	..	..	6

*Disposal:*

Controlled heat treatment .. .. ..	..	..	5
Still under detention at end of year .. .. ..	..	..	1

*Salmonella types isolated from the 40 infected samples*

9	S. Bareilly
8	S. Thompson
4	S. Rubislav
2	S. Perth
2	S. Way Cross
2	S. Paratyphi B
2	S. Newport
1	S. Typhimurium
1	S. Tshongwe
1	S. Munster
1	S. Litchfield
1	S. Welterden
1	S. Mchanga
1	S. Charity
3	Unidentified Group B Salm.
1	," , " C Salm.
Total	40

The following table gives the monthly percentage of desiccated coconut samples found to be infected with *Salmonellae*. The trend suggests an improvement during the course of the year.

1960	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
No. of samples taken (5%)	90	63	126	37	111	64	95	49	35	31
% Positive	11.10	7.94	7.12	—	5.41	3.12	6.31	4.1	—	—

#### *Imported Jams*

Samples of imported strawberry, raspberry and apricot jam were found to be free from preservatives and colouring matter. The Public Analyst, however, reported that the total soluble solids, in each of the samples, was below the legal minimum prescribed in the Food Standards (Preserves) Order, 1953. Repeat samples were taken and these were also found to be deficient in total soluble solids. The importers were informed that the sale of this jam would be a breach of the above regulations. The two consignments concerned were not permitted to be distributed to the trade and arrangements are being made for alternate disposal. Samples from a third consignment, which arrived in mid-December, showed that the total soluble solids were in excess of the minimum legal requirements.

#### *Frozen Meat Imports*

Thirty-five shipments of frozen meat, amounting to 23,933 tons, were imported during the year. These imports were all from Australia or New Zealand and consisted mainly of frozen lambs or sheep, together with small parcels of frozen beef quarters, sundry beef cuts, lamb cuts and offal.

Inspection of the meat within the holds at the time of discharge gave evidence of the care which had been taken to ensure that it would arrive in a satisfactory condition, but unfortunately gross dirt contamination sometimes takes place after arrival, either at a previous discharging port in this country or on the continent. Because of the London Docks strike, some of the ships with meat cargoes were diverted to the continent to unload London cargoes. When these ships finally arrived at Avonmouth to complete discharge, the working tiers of mutton and lamb carcasses were found to be in a disgustingly dirty condition.

More than 5,200 lamb and sheep carcasses from 13 different ships, were detained because of dirt contamination. These were reconditioned and recovered at the local cold store under supervision.

Contamination of this nature is mainly the result of neglect or indifference on the part of the stevedores and their employees, but blame must also be attached to ships officers who, through lack of supervision, fail to insist that meat in the cargo holds is adequately protected from contamination during the course of discharge.

It is anticipated, so far as ports in England and Wales are concerned, that the implementation of the provisions contained in the Food Hygiene (Docks, Carriers, etc.) Regulations, 1960, which came into force in November, will bring about an improvement in the protection of cargoes of this nature. Polythene bags, have recently been brought into use for the transport of mutton and lamb carcasses. It is hoped that this form of protection will be extended to all shipments. One result of this additional, impervious covering is a minimum of carcase desiccation with less reduction in weight.

*Preservatives in Food*

A small parcel of canned Canadian fruit pie fillers, intended for a Food Trade Exhibition in London, was inspected on arrival at Avonmouth. The labels stated that the contents included sodium benzoate. Chemical analysis confirmed the presence of this preservative, which is prohibited in the Preservatives in Food Regulations.

The food was not intended for sale for human consumption, and formal action was unnecessary, but in order to prevent any future infringements, the Canadian Trade Ministry was asked to inform the Canadian canners of the relevant provisions of our regulations. Samples drawn from subsequent shipments have contained no sodium benzoate, permissible amounts of sulphur dioxide having been substituted as a preservative.

**Samples of Imported Foodstuffs taken during 1960 and sent to the Analyst or Bacteriologist for examination**

No. of Samples	Description of commodity	Country of origin	Exam. for*	Result
2	Apples, fresh .. .	Holland	C	Satisfactory
4	Asparagus tips (canned) .. .	U.S.A.	BC	"
6	" " .. .	Canada	BC	"
8	Apricots (canned) .. .	South Africa	BC	"
2	" " .. .	Australia	BC	"
3	" (dried) .. .	Spain	BC	"
1	" nectar (canned) .. .	South Africa	P	"
1	" .. .	Australia	C	"
14	Beef steak (Canned) .. .	Australia	BC	2 Unsatisfactory
2	Beets (canned) .. .	Holland	BC	Satisfactory
1	" .. .	Canada	C	"
4	Beans cut (canned) .. .	U.S.A.	BC	"
6	" " .. .	South Africa	BC	"
2	" " .. .	Belgium	BC	"
2	Bloater Spread (canned) .. .	Canada	BC	"
1	Beef stock (jar) .. .	Tanganyika	C	"
2	Biscuits (pkts.) .. .	Belgium	C	"
2	Bread improver .. .	Holland	BC	"
2	Carrots (canned) .. .	Belgium	BC	"
1	" .. .	Holland	C	"
2	Celery (canned) .. .	Belgium	BC	"
41	Corned beef (canned) .. .	Argentine	BC	7 Unsatisfactory
8	" " .. .	Brazil	BC	Satisfactory
28	" " .. .	South Africa	BC	"
14	" " .. .	East Africa	BC	"
4	" " .. .	Ireland	BC	"
2	" " .. .	France	BC	"
4	Chocolate .. .	Ireland	C	"
8	Cockles (jars) .. .	Holland	B	"
1	Coffee, grounds .. .	Germany	C	"
1	Cheese pieces .. .	Swiss	C	"
4	Chicken (canned) .. .	Holland	BC	"
2	" .. .	U.S.A.	BC	"
2	Crab meat (canned) .. .	Canada	BC	"
16	" " .. .	Japan	BC	"
2	Corn Kernel (canned) .. .	Canada	BC	"
2	Chili sauce (bottled) .. .	Canada	BC	"
1	Currants .. .	Australia	C	"
2	Cherry pie filling (c) .. .	Canada	BC	1 Unsatisfactory
4	Condiments (canned) .. .	Italy	BC	Satisfactory
2	Consommé soup (canned) .. .	Canada	BC	"
2	Corn relish (jars) .. .	Canada	BC	"
1	Cherries (canned) .. .	Canada	C	"

\* See key at end of Table

No. of Samples	Description of commodity	Country of origin	Exam. for*	Result
720	Desiccated coconut (jars)	Ceylon	B	43 Unsatisfactory
1	Egg rusks (packets)	Holland	C	Satisfactory
13	Egg albumen, Frozen	Holland	B	"
1	Dates .. .	U.S.A.	C	"
1	Farinoca .. .	Holland	C	"
4	Fruit salad (canned)	South Africa	C	"
1	" " "	Italy	C	"
17	" " "	Spain	BC	"
3	" " "	U.S.A.	BC	"
2	Grapefruit juice (canned)	Holland	BC	"
1	" " "	Israel	C	"
3	" " "	U.S.A.	BC	"
1	" fresh .. .	Trinidad	C	"
3	Grapefruit fresh .. .	Israel	P	"
1	" section (canned)	U.S.A.	BC	"
2	" " "	South Africa	C	"
1	" " "	Brazil	C	"
3	Grapes fresh .. .	Spain	C	"
2	" in syrup (canned)	South Africa	BC	"
2	Groundnut flaked	Holland	C	"
3	Gherkins (canned)	Holland	C	"
1	Guavas (canned)	South Africa	C	"
4	Ham (canned)	Denmark	BC	"
2	" .. .	Holland	BC	"
1	" .. .	Germany	B	"
7	" and Pork (canned)	Brazil	BC	"
12	" .. .	Argentine	BC	"
2	Hearts, frozen .. .	New Zealand	C	"
1	Hot Dog Relish (canned)	U.S.A.	C	"
1	Hamburger Relish (canned)	U.S.A.	C	"
1	Haddock in sauce (canned)	Warehouse	C	"
8	Irish Stew (canned)	Australia	BC	"
1	Jelly Almond .. .	Eire	C	"
34	Jam apricot (jars) .. .	Hungary	C	"
7	" raspberry (jars) .. .	"	C	"
7	" strawberry (jars) .. .	"	C	"
5	Lemons fresh .. .	Cyprus	C	"
1	" .. .	Italy	C	"
2	" juice (canned) .. .	U.S.A.	BC	"
2	Loganberries (canned) .. .	South Africa	C	"
6	Luncheon meat .. .	Australia	BC	"
2	Lobster (canned) .. .	Canada	BC	"
1	Marmalade (canned) .. .	South Africa	C	"
36	Minced beef loaf (canned) .. .	Australia	BC	"
3	Mushrooms (canned) .. .	South Africa	BC	"
2	" .. .	Australia	BC	"
2	" .. .	Denmark	BC	"
1	Meat curing powder .. .	Canada	C	"
2	Mangoes sliced (canned) .. .	South Africa	BC	"
5	Milk condensed (canned) .. .	N. Ireland	BC	"
2	" evaporated (canned) .. .	Holland	BC	"
10	" .. .	Holland	BC	"
6	Milk powder .. .	Ireland	BC	"
2	Mussels in brine (jars) .. .	Denmark	BC	"
2	Melons, fresh .. .	Spain	C	"
17	Oranges fresh .. .	Israel	C	"
5	" .. .	Spain	C	"
1	" .. . mandarin .. .	Spain	C	"
4	Oranges mandarin (canned) .. .	Japan	C	"
2	Orange juice (canned) .. .	Trinidad	C	"
2	" .. .	U.S.A.	C	"
1	" .. .	Israel	C	"
1	" .. .	Spain	C	"

\* See key at end of Table

No. of Samples	Description of commodity	Country of origin	Exam. for*	Result
2	Oyster soup (canned)	Canada	BC	Satisfactory
2	" spread (canned)	Canada	BC	"
4	Pimentoes (canned)	Italy	BC	"
7	Peas, garden (canned)	South Africa	BC	"
2	"	Italy	BC	"
3	Paw paws (canned)	South Africa	BC	"
7	Prunes (packets)	U.S.A.	PC	"
3	" "	Canada	C	"
2	" "	Australia	C	"
1	Peaches (canned)	Canada	C	"
11	" "	South Africa	BC	"
6	" "	U.S.A.	BC	"
8	" "	Australia	BC	"
3	" "	Spain	BC	"
1	Peaches (dried)	Australia	C	"
1	Pears (canned)	Italy	C	"
4	" "	South Africa	C	"
3	" "	Australia	C	"
1	" fresh"	Holland	C	"
1	" fresh"	Holland	C	"
3	Pineapple (canned)	Malaya	C	"
1	" "	China	C	"
7	" juice" (canned)	South Africa	BC	"
3	" juice" (canned)	South Africa	C	"
4	Potato powder	Holland	C	"
2	Pork luncheon meat (canned)	Denmark	BC	"
2	Pork brawn (canned)	Denmark	BC	"
2	Pineapple juice	Hawaii	C	"
22	Pilchards in tomato (canned)	South Africa	BC	"
4	Pilchards natural (canned)	South Africa	BC	"
2	Peach pie filling (canned)	Canada	C	1 Unsatisfactory
2	Peel, cut (dried)	South Africa	C	Satisfactory
1	" Peach, " nectar" (canned)	Australia	C	"
1	Pickles, wafer (jar)	Australia	C	"
1	Pork lunchein meat (canned)	Canada	C	"
1	Raisins (packet)	Germany	B	"
3	" "	Canada	C	"
1	" "	U.S.A.	C	"
1	" "	Australia	C	"
1	" "	South African	C	"
3	" "	Iran	C	"
4	Ravioli (canned)	Italy	BC	"
5	Red cherries (canned)	Italy	C	"
3	Raisins, seedless (packets)	U.S.A.	PC	"
1	Red cherries (canned)	Canada	C	"
2	Sauce (bottles)	Italy	BC	"
5	Steak and veg. (canned)	Australia	BC	1 Unsatisfactory
30	Stewed steak (canned)	South Africa	BC	Satisfactory
25	" " "	Australia	BC	"
10	" " "	East Africa	BC	"
6	" " "	Eire	BC	"
29	Steak casserole (canned)	Australia	BC	"
3	Steak and kidney pudding (canned)	Australia	BC	"
11	Salmon (canned)	U.S.A.	BC	"
2	" "	Canada	BC	"
25	" "	Japan	BC	"
5	Salmon and Shrimp spread (jars)	Canada	BC	"
7	Salmon spread (jars)	Canada	BC	"
3	Sultanas (packets)	Australia	C	"
3	" (jars)	Turkey	C	"
4	Spaghetti (canned)	Canada	BC	"
2	Spaghetti and sausage (canned)	Denmark	BC	"
2	Sweet corn (canned)	Canada	BC	"

\* See key at end of Table

No. of Samples	Description of commodity	County of origin	Exam. for *	Result
15	Sardines (canned) . . .	Portugal	BC	Satisfactory
2	Spray dried skim milk (pkt.) . . .	Australia	BC	"
4	Shrimps (canned) . . .	Canada	BC	"
2	Shrimps in brine (canned) . . .	Norway	BC	"
6	Sausages (jars) . . .	Denmark	BC	"
2	" (canned) . . .	Germany	BC	"
1	" . . .	Ireland	C	"
2	Strawberries (fresh) (bskts) . . .	France	C	"
2	Spinach (canned) . . .	Belgium	BC	1 Unsatisfactory
1	Sweets (loose) . . .	Eire	C	Satisfactory
56	Tomatoes (canned) . . .	Italy	BC	"
4	" (jars) . . .	Bulgaria	BC	"
6	" juice (canned) . . .	Italy	BC	"
2	" " "	Canada	BC	"
1	" " "	Australia	C	"
2	" " "	Hungary	BC	"
3	" purée (canned) . . .	Italy	BC	"
2	" ketchup (canned) . . .	Italy	BC	"
15	Tea (packets) . . .	Ceylon	C	"
2	Tongue (canned) . . .	Australia	BC	"
2	" " "	Holland	BC	"
2	" " "	Denmark	BC	"
2	Tuna fish spread (canned) . . .	Canada	BC	"
2	Truffle . . .	Denmark	BC	"
1	Veg, dehydrated . . .	Holland	C	"
4	Figs in Syrup (canned) . . .	Italy	BC	"
3	Figs (packets) . . .	Turkey	C	"

\* Key

- B Bacterial contamination.  
 C Chemical contamination.  
 P Preservatives.

### Miscellaneous Foods (Condemned)

Description	Reason for condemnation	T.	C.	Q.	lb.
Butter . . .	Crushed and contaminated . . .	1	2	0	0
Cereals . . .	Insect infested . . .	2	0	9	
Citrus peel . . .	Dirt contaminated . . .	2	2	26	
Cocobean . . .	Mould contaminated . . .			24	
Coffee beans . . .	Mould contaminated . . .	5	14	1	16
Desiccated coconut . . .	Dirt and bacterial contaminated . . .	1	12	0	8
Flour . . .	Dirt contaminated . . .	3	5	0	22
Grapefruit fresh . . .	Decomposed and mouldy . . .		4	1	4
Lard . . .	Dirt contaminated . . .		1	1	9
Milk powder . . .	Contaminated . . .	18	2	2	0
Onions . . .	Decomposed . . .	4	19	2	6
Peas . . .	Wet and mouldy . . .			1	18
Peanuts . . .	Mould contaminated . . .		9	2	11
Raisins . . .	Dirt contaminated . . .	1	12	3	27
Rusks . . .	Crushed and burst pkts. . .			25½	
Sultanas . . .	Dirt contaminated . . .	1	0	18	
Strawberry pulp . . .	Crushed & dirt contaminated . . .	3	1	21	
Tea . . .	Contaminated and mouldy . . .	10	3	10	
Tomatoes (fresh) . . .	Decomposed . . .		3	2	12
Wheat . . .	Wet damaged and mouldy . . .	117	5	1	17
	Total Weight . . .	154	13	2	3½

**Meats (Condemned)**

			T.	C.	Q.	lb.
Bacon .. . .	Abcess in neck .. . .	..				2
Beef .. . .	Mould contaminated .. . .	..		9	3	10
Lamb and mutton .. . .	Mould contaminated and rancid .. . .	..	1	9	2	13
Pork .. . .	Mould contaminated .. . .	..		6	0	12
	Total Weight .. . .	..	2	5	2	9

**Canned Goods (Condemned)**

	Qty. Tins		T.	C.	Q.	lb.
Condiments .. . .	91	Crushed and broken .. . .			2	13
Cream Milk .. . .	336	Stale and solidified .. . .	2	2		14
Fish .. . .	265	Crushed and burst .. . .	1	0		8½
Fruit .. . .	9,665	Crushed, blown, burst .. . .	7	13	0	7
Fruit juice .. . .	287	Crushed, blown, burst .. . .		13	2	23
Jam .. . .	111	Crushed and burst .. . .	2	1		22½
Ketchup .. . .	121	Broken and burst .. . .		3		7
Meat .. . .	589	Broken, blown and burst .. . .	5	1		0½
Sauce .. . .	24	Broken .. . .				14
Tomatoes .. . .	1,688	Blown, burst, rust holed .. . .	1	2	2	16
Tomato paste .. . .	575	Burst and holed .. . .	2	9	1	2
,, puree .. . .	73	,, .. . .		6	2	0
,, juice .. . .	10	,, .. . .			2	21
Vegetable .. . .	104	Burst, crushed and holed .. . .			2	22
Total .. . .	13,949	Total Weight .. . .	12	19	2	2½
		Total weight of all foodstuffs condemned .. . .	169	18	2	15

**Particulars of Foods Detained for Re-exportation or Re-conditioning at Local or Other Food Depots**

Description of food	Reason for detention	Tons (approx.)
Butter .. . .	Brine stain, wet damage and dirt contamination .. . .	4
Canned fruit .. . .	Crushed and burst and blown tins .. . .	134
Canned meat .. . .	Crushed and burst and blown tins .. . .	3
Canned tomatoes .. . .	Crushed and burst and blown tins .. . .	43
Canned tomato paste .. . .	Crushed and burst and blown tins .. . .	29
Cocoa beans .. . .	Wet damaged and mouldy .. . .	7
Coffee beans .. . .	Wet damaged and mouldy .. . .	108
Dried fruit .. . .	Wet damaged fermenting and mouldy .. . .	26
Dried milk powder .. . .	Wet damaged and mouldy .. . .	87
Desiccated coconut .. . .	Bacterial contamination and mouldy .. . .	34
Flour .. . .	Wet damaged and mouldy .. . .	126
Ground nut kernels .. . .	Wet damaged and mouldy .. . .	5
Lambs (frozen) .. . .	Dirt contamination .. . .	68
Lard .. . .	Dirt contamination and rancidity .. . .	14
Tea .. . .	Wet damaged and mould contamination .. . .	11
	Total weight .. . .	699

## 2. Dock Sanitation

### *Factories and Canteens*

These premises were regularly inspected. A list of the defects found, and afterwards remedied by the management is given hereunder:

#### *Factories*

Defective fittings in sanitary accommodation	..	..	..	..	3
Blocked drainage in washplaces	..	..	..	..	3
Blocked soil pipes and inspection chambers	..	..	..	..	14
Dirty condition of sanitary accommodation	..	..	..	..	15
Rearrangement of sanitary accommodation and installation of urinal	..	..	..	..	1
Unsatisfactory refuse disposal	..	..	..	..	3
Messrooms and cloakrooms requiring redecoration	..	..	..	..	4
Defective table tops	..	..	..	..	2

#### *Canteens*

Defective (worn out) washup sinks	..	..	..	..	2
Lack of constant hot water supply	..	..	..	..	1
Insanitary garbage containers	..	..	..	..	9
Defective garbage containers	..	..	..	..	4
Use of unclean crockery	..	..	..	..	3
Defective mechanical washing machine	..	..	..	..	1
Defective drainage	..	..	..	..	5
Absence of hand washing notices	..	..	..	..	4
Defective paintwork (walls and ceilings)	..	..	..	..	2
Defective ventilation in food store	..	..	..	..	1

#### *Public Conveniences*

Numerous complaints were received concerning the dirty condition of public conveniences at the Dry Dock in Avonmouth. "Special ratings" have been using this place because the existing "native type" closets provided for them are not readily accessible, and difficult to approach after dark. For this reason the Port Authority was asked to provide toilets for them in a more convenient place.

#### *Pigeons*

Nuisances caused by pigeons in transit sheds have again been a matter for concern. As an experiment the Port Authority arranged for one shed at the City Docks to be treated with a deterrent. Further action depends upon the result of this trial, but the range of pigeon activity makes it impracticable for such a method of control, however successful, to be used at Avonmouth Docks.

## 3. Measures against Rodents on Docks, Quays, etc.

Systematic trapping, alternating with "Warfarin" bait treatment, and occasional baiting with zinc phosphide was in continuous operation throughout the year. By these means, rodent control in mills, factories, warehouses and waste land was satisfactorily maintained. Occasionally it became necessary to give special attention to some of the granaries and mills. These were the occasions when rat activity was observed immediately after an intake of bulk grain or bagged provender from infested ships. In these circumstances very close co-operation was maintained with the managers of mills and granaries, who were forewarned of the need to watch the cargo—especially bagged animal food—to prevent rats gaining access to their premises.

Of the 110 rats killed on the dockside during the year only 4 were of the brown species (*Rattus Norvegicus*). Brown rat activity is very slight in the dock area, and is confined to a few locations where burrowing is possible, and where feeding conditions are most suitable for this species.

Complaints of slight infestation with mice were received from various premises during the year. These were given prompt and effective attention.

A complete survey of all warehouses, transit sheds and business premises was carried out at all docks during the year. This survey showed that the repressive measures in operation were keeping the rodent population down to a satisfactory minimum. Shortly after the survey was completed, a heavy rat infestation occurred quite suddenly in one of the City Docks transit sheds. This was believed to arise from bales of infested sacks which had been brought into the building. Prompt action brought about a clearance of the trouble and there was no recurrence.

In warehouses, mills and transit sheds, day to day changes in the kind of commodity handles and stored, some of this possibly from infested sources, make it necessary to carry out frequent inspection. As in ships, successful rodent control can only be achieved by continuity of action.

#### 4. New Legislation

The Food Hygiene (Docks, Carriers, etc.) Regulations, 1960, came into operation on November 1st. The enforcement of those parts of the regulations which necessitate structural work has been deferred until May 1st, 1961. A survey of requirements at Bristol and Avonmouth Docks, was made during November. This is included below. Discussions have been held with Port Authority and Stevedoring Company's representatives, and no difficulty or delay in bringing the regulations into effect is anticipated. Indeed, many of the requirements have been accepted as routine procedure at this port for a considerable time.

### SURVEY OF REQUIREMENTS AT BRISTOL AND AVONMOUTH DOCKS

#### Food Hygiene (Docks, Carriers, Etc.) Regulations, 1960

Regulation No., Heading and General Purport	Recommendations, Action taken and Comments
5. Condition of accommodation allocated for handling food	<p><i>Bristol Docks</i></p> <p>(1) Periodic cleansing of the floors of transit sheds where bacon sides are handled and stored. (Transit Sheds U, V, A, and T.)</p> <p>(2) Measures for the suppression of pigeon infestation in premises used for the temporary storage of food. (It is understood that these measures are now under consideration by the Docks Engineer.)</p>
A person allocating accommodation for the handling of food shall not permit the use of accommodation which is in such a state as to expose the food to the risk of contamination.	

#### Avonmouth Docks

Conditions are satisfactory throughout the docks area and are under continuous survey.

*Regulation No., Heading and General Purport**Recommendations, Action Taken and Comments**6. Cleanliness of vessels, vehicles, equipment, etc.*

A person providing these for the movement of food must ensure that "any surface with which food is liable to come into contact—is kept in such a condition—as to prevent—any risk of contamination."

*Bristol Docks*

Regular cleansing of the wooden pallets used for stacking bacon in the transit sheds. These should be periodically moved to the outside quay and washed down with water and a detergent. This is the responsibility of the stevedores who provide this equipment. The Port Authority is responsible for the provision of an adequate supply of clean water.

*Avonmouth Docks*

Vessels, vehicles, containers and equipment such as discharging gear, nets, trays, pallets, skips, dillies, wagons and trucks are regularly inspected. Defects are remedied by the stevedores who employ this equipment at the request of the port health inspector. This action has always been along informal lines, and I anticipate that this will continue.

*7. Food to be protected from the risk of contamination*

A port employer must secure that any person employed by him shall so place the food as to avoid the risk of contamination.

(Note: (a) "Contamination" includes contamination by odour. (b) This regulation applies particularly to quay surfaces and transit shed floors.)

*Bristol Docks*

Pallets used for the temporary stacking of sides of bacon should be raised to at least 4" from the floor by means of cross bearers to prevent carcase overhang and contamination from the shed floor, and suitable means should be devised to prevent the deposition of bales of bacon upon the floors of transit sheds whilst awaiting loading. The existing method is an objectionable one.

*Avonmouth Docks*

Steps are being taken to provide and instal movable platforms and adequate netting to prevent contamination. The commodities mainly concerned are meat and cheese.

*9. Personal Cleanliness*

Incompletely covered food must be handled in such a way as to prevent any contamination, and a series of rules must be observed by persons engaged in the handling of food.

*Avonmouth and Bristol Docks*

Notices summarizing the requirements which apply to dock workers should be prominently displayed at call stands, quays and transit sheds at these docks. The obligations of dock workers as to the cleanliness of person, clothing, etc., should be clearly set out on this notice, together with the penalty for contravention of these regulations.

*Regulation No., Heading and General Purport*

*10. Handling of meat*

Precautions must be taken to prevent meat (which includes bacon and ham) from coming into contact with exposed parts of the person, other than the hands and forearms, or with any clothing other than protective clothing or a washable head covering.

(Note: There is no meat "humping" at this port; head coverings are therefore not required.)

*Recommendations, Action Taken and Comments*

*Avonmouth Docks*

The Port Authority is giving the lead to other employers by providing aprons for meat handlers in their employ. Canvas overshoes would be an ideal protection, but they would be expensive and operationally impracticable because of the size and diversification of the dock labour force. Clumsily fitting overshoes would also increase the accident hazard. With frozen meat, foot wrappings of clean hessian meet the requirements of the regulations.

Imports of bacon from Holland, Eire and Northern Ireland present a problem at *Bristol Docks*. Approximately 600 bales, each consisting of four sides of bacon, are delivered each week. These are wrapped in hessian, which seldom provides an adequate covering. By contrast with frozen meat, bacon sides are soft and flaccid, and their hessian coverings become soaked with a greasy saline exudate which leads to excessive dirt contamination within a ship's hold. Moreover, walking over these bales is sometimes inevitable during the off-loading stages. The process is regularly supervised by the port health inspector, who advises accordingly, but consideration may eventually have to be given to the provision of washable canvas overshoes for this work.

*11. Persons suffering from certain infections, etc.*

When any handler of open food becomes aware that he is suffering from, or is a carrier of one of the enteric infections or any staphylococcal infection likely to cause food poisoning, he must at once give notice of this fact to his employer, who shall at once inform the M.O.H.

See my recommendation under regulation No. 9. The proposed notices should set out in full the provisions of Part 3 of these Regulations, and should be prepared and issued by the Health Department.

*12. Responsibility of occupiers and owners*

The owner, or person allocating the premises, shall be responsible for such of these regulations as are of a structural character. The occupier of the premises or place to which these regulations apply shall comply with the remaining provisions, e.g., cleanliness and hygiene.

A distinction between the responsibilities of owner and occupier is made under the various headings of this survey.

*13 and 14. Soil drainage systems and Cisterns*

As in the Principal Regulations.

No action is required.

*Regulation No., Heading and General Purport**Recommendations, Action Taken and Comments**15. Sanitary Conveniences*

Cleanliness, Lighting and Ventilation, etc.

*Bristol Docks*

Conveniences at T, U, L and M sheds have poor natural lighting. This should be improved by the provision of light coloured interior decoration to reflect the natural light, or by the provision of artificial lighting during working hours.

(The adaptation of some of the sanitary conveniences is also dealt with under Regulation 17, below.)

*16. Water Supply*

To be provided in reasonable proximity to all food buildings.

No action recommended. At all food loading quays and transit sheds, there is an adequate supply of clean and wholesome water.

*17. Washing Facilities*

"Suitable and sufficient washing facilities—conveniently accessible to persons engaged" in the handling of open food.

*Essentially, it is considered that the aim of these Regulations is the prevention of the spread of the enteric infections. It is therefore felt that the ultimate ideal should be the provision of washing facilities at each of the existing modern type conveniences at Avonmouth and Bristol Docks. This cannot be insisted upon under present circumstances, but is a long term recommendation.*

*Avonmouth Docks*

(1) The inclusion of three wash-basins with soap dispenser and paper towels at the modern convenience situated between O and P sheds. Nearly all of the open food at Avonmouth is discharged at this berth.

(2) The provision of a mobile hand washing machine which dispenses a waterless washing compound, for use on the occasions when open food is discharged elsewhere.

*Bristol Docks*

Installation of a wash-basin at the sanitary convenience situated at the end of T shed.

*18. First Aid Materials*

The Regulations prescribe, inter alia, waterproof dressings for the use of persons engaged in the handling of food.

These have been installed in all first aid boxes at quays and transit sheds. First aid boxes are regularly inspected and replenished when necessary.

*19. Lighting of Food Buildings*

"Suitable and sufficient".

No structural alterations required.

*20. Ventilation*

"Suitable and sufficient".

No structural alterations required.

*21. Sleeping Places*

Not to be used as food buildings.

This Regulation does not apply.

*Regulation No., Heading and General Purport*

*Recommendations, Action Taken and Comments*

'22. *Cleanliness and repair etc., of food buildings*

Cleanliness of internal surfaces, the promotion of hygiene and the prevention of infestation by vermin.

This is a matter of departmental routine, and is under constant supervision. In this Regulation, provision is made for the effective proofing of food buildings in order to prevent any risks of infestation by rats, mice and insects.

23. *Accumulations of refuse etc.*

Prohibited.

This is dealt with during the course of daily inspections.

5. *Miscellaneous*

*Bananas*

As in previous years, through the kindness of Messrs. Elder & Fyffes, your officers have been able to arrange for the distribution of gifts of bananas which were too ripe for storage. The amount available has been higher this year, and distribution was as follows:—

Dr. Barnardo's Homes	604 lb.	Frenchay Hospital	616 lb.
Hortham & Brentry Hospital	392 lb.	Ham Green Hospital	560 lb.
Day Nurseries	528 lb.	Muller's Homes	624 lb.
Children's Committee	280 lb.	Southmead Hospital	504 lb.
Children's Hospital	504 lb.		
		Total	<u>4,612 lb.</u>

## SPECIAL REPORTS

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## THE WILLIAM BUDD HEALTH CENTRE

### *Introduction*

The year under review has unfortunately seen no material expansion in the services provided at the Centre, but the need for a diagnostic unit and a consulting physician becomes more and more apparent. Nevertheless, a start has been made on what should be some interesting experiments in making the best use of existing facilities and staff. The doctors have already expressed enthusiasm about the idea of attaching to each practice either a health visitor or a combined health visitor/home nurse.

Fresh interest has been aroused in the concept of health centre practice by the completion of Dr. Sluglett's survey which was sponsored by the Medical Practitioners' Union who have now published "Report on Health Centres" and which has already received favourable press notices. Dr. Sluglett, who has been Chairman of the House Committee since its inception and previously Chairman of the Working Party set up to prepare a scheme for the health centre, was awarded an M.D. for his thesis on Health Centres.

### *Staffing*

The staffing position has stabilised. For the first time there has been no permanent staff change during the year and the general practitioners have recorded their indebtedness for the willing assistance invariably given. Increasing work, however, has made it necessary to augment the staff allocated from the Department's central nursing pool.

The doctors have agreed to leave to individual firms whether or not white coats should be uniformly worn. It is a sign of the times that steps have had to be taken to restrict the use of the car park since, during surgery times, patients' cars were filling the park.

### *Equipment*

At the request of the physiotherapist, an infra red lamp has been provided and the doctors are making the greatest use of it.

The number of referrals to hospital diagnostic units has remained consistently high and the purchase of a haemoglobin photometer has enabled routine and special blood estimations to be done on the spot by the nursing staff. An occasional check is made on the results by the examination of parallel specimens by the pathological laboratory.

The provision of additional E.N.T. equipment has been deferred pending the appointment of a sessional E.N.T. consultant by the Regional Hospital Board.

### *Committees*

The House Committee met formally on two occasions, the 30th May and the 17th October but informal meetings dealing with individual services and interested bodies were held throughout the year. Mr. S. A. Forster, who had succeeded Mr. Pillinger as Clerk to the Bristol Executive Council, joined the Committee. It was not found necessary during the year to convene a meeting of the Joint Advisory Committee.

### *Research Surveys*

After carefully reviewing possible projects, it was felt that the basic need was for operational research in general practice. The basic data will be provided by carrying out a census of age and sex composition of the various practices and the register should be completed soon. It is already providing a useful check on records and the Executive Council is co-operating to the full in completing dates of birth. Although the initial production is necessarily a slow process, the staff working on it are showing interest as the usefulness of the register emerges. Some interesting data should become available for future reports.

### *Appointment System*

Careful thought has been given to the possibility of introducing an appointment system for patients but the idea was rejected for this area.

### *Co-operation with Teachers*

The doctors' relationships with the teachers and the school health service in the district have been improved by a series of lunch time meetings and discussions and the School Welfare Officer has been asked to attend regularly at the Health Centre for consultation with the doctors.

### *Care and After Care*

Special attention has been given by the doctors to the early diagnosis of diabetes and the Diabetic Association has been allowed to hold meetings at the clinic.

A weekly chiropody session has now been established and about ten elderly people are treated per session. The clientele number 70 — 80.

Discussion has taken place on the possibility of inaugurating a geriatric clinic run by either one of the doctors interested in this work who would take patients referred by other doctors, or perhaps by a local authority medical officer. The main purpose would be health education and "secondary prevention"; nutritional advice would be given and haemoglobin tests performed as a routine. It was agreed that such a clinic might relieve the doctors of regular calls on some old people and benefit some mentally confused old folk. The age-sex census will be of use in this venture.

### *Nutrition Clinic*

Increased use of the services of the nutritionist was made during 1960, 180 new patients being referred compared with 139 in the previous year. Total attendances were 891. Participation in classes and demonstrations arranged for school children, housewives and expectant mothers in the locality have also continued.

### *Psychiatric Social Work*

From the beginning of 1960 psychiatric work at the Health Centre has formed part of the overall Child and Family Guidance Service in the City.

One weekly session has been regularly given by the whole team working together, both for diagnostic and treatment cases, and one by the psychiatric social worker only—when mothers are seen by themselves, or with their pre-school children.

The educational psychologist regularly visits schools in the area and is thus in a position to help teachers with nervous, difficult, or backward children and give valuable reports to the Health Centre staff, and to general practitioners.

Once a month the consultant psychiatrist holds a conference attended by the medical officer, the sisters, the health visitors working at the Centre, and the rest of the psychiatric team. Discussion and inter-change of views on every kind of emotional problem arising in their respective fields has been found to be both stimulating and helpful.

The psychiatric social worker has continued to give talks on emotional problems of pregnancy and lactation to ante-natal mothers attending parentcraft courses, and these have been linked as closely as possible with the work of the health visitors on infant feeding and care.

Seventy-six new cases have been referred, of whom 71 had been seen by the end of the year,—38 by the whole team, 21 by the psychologist only, and 12 by the psychiatric social worker only. Of the total number of children referred, 11 were under 5 years. Six pre-school children seen in 1959 have continued to attend in 1960.

There have been 258 interviews with old patients (of whom 15 have attended for regular weekly treatment for periods varying from three to twelve months); 124 home visits have been paid.

There has been one staff change during the year. Mr. King left Bristol in February, and Mr. Alan Hickish replaced him as educational psychologist.

#### *Relaxation and Parentcraft Classes*

Relaxation classes are now an accepted part of ante-natal work and are conducted by Miss Hogg, Senior Physiotherapist. There have been 42 classes and 300 attendances.

Parentcraft classes are held on the same afternoon at the Centre as the relaxation classes. There have been 41 sessions and 294 attendances.

Also there were four evening sessions for expectant mothers and fathers when films were shown. 116 people have been present.

These sessions continue very successfully.

#### *General Practitioner Work*

At the end of 1960 there were 11,766 patients registered at the Centre, an increase of 132 since the last report.

#### *Patients' Attendances at the Centre*

Table I shows the attendance by each quarter for each general practitioner firm.

**Table I**

Doctors	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter		Totals	
	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960
A ..	3,916	3,731	3,296	3,331	3,205	3,273	3,295	3,159	13,712	13,494
B ..	631	631	591	534	500	644	546	617	2,268	2,426
C ..	2,836	2,502	2,264	2,318	2,076	2,134	2,226	2,332	9,402	9,286
D ..	1,421	1,639	1,129	1,556	1,351	1,271	1,469	1,417	5,370	5,883
E ..	1,816	1,704	1,509	1,588	1,403	1,460	1,576	1,552	6,304	6,304
Totals ..	10,620	10,207	8,789	9,327	8,535	8,782	9,112	9,077	37,056	37,393

Table 2 shows the volume of work undertaken by the nursing and medical staff in the minor surgery theatre (electro-cardiograms included).

**Table 2**

Doctors	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter		Totals	
	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960
A ..	1,945	2,062	2,131	1,993	2,094	2,415	2,024	2,054	8,194	8,524
B ..	152	194	129	129	164	160	112	141	557	624
C ..	858	514	610	718	834	645	626	499	2,928	2,376
D ..	137	343	182	403	371	292	408	369	1,098	1,407
E ..	601	415	711	434	712	495	596	455	2,620	1,799
Totals ..	3,693	3,528	3,763	3,677	4,175	4,007	3,766	3,518	15,397	14,730
Schools ..	247	39	162	60	81	48	97	62	587	209
Casuals ..	363	203	354	322	508	264	296	237	1,521	1,026
Full Total	4,303	3,770	4,279	4,059	4,764	4,319	4,159	3,817	17,505	15,965

**Table 3—General Practitioner—Maternal and Child Health Work**

			1959	1960
Sessions ..	..	..	243	225
Mothers attended ..	..	..	1,374	1,579
Average ..	..	..	5.6	7.0

**Table 4—Number of patients referred to Hospital Specialists (all doctors)**

Year	Orthop.	Paed.	Phys.	Surg.	E.N.T.	Gyn.	Total
1958	107	50	307	227	252	116	1,059
1959	134	53	319	296	258	151	1,211
1960	170	69	319	342	245	153	1,298

**Table 5—Patients referred to Hospital Diagnostic Units (all doctors and Local Authority)**

Year	Chest X-ray	Haemoglobin	Blood Count	E.S.R.	Urine	Total
1958	160	356	—	—	84	600
1959	104	414	1	—	62	581
1960	97	598	—	42	92	1,435
		606 (A. Natal)				

Number of patients referred by all doctors for X-ray other than chest X-rays = 60 during 1960.

**Table 6—Emergency Calls**

Year	Number of night calls—Doctors	Number of night calls—Sisters	Total
1958	617	305	922
1959	645	378	1,023
1960	820	400	1,220

**Table 7—Local Authority Work—Maternal and Child Welfare**

			<i>1959</i>	<i>1960</i>
Medical Officers' session	..	..	50	—
Mothers attended	..	..	297	—
Average	..	..	6·0	—
Midwives' sessions	..	..	44	39
Attendances	..	..	166	289
Average	..	..	3·8	7·4

**Table 8—Local Authority Work—School Health**

			<i>1959</i>	<i>1960</i>
School doctors' sessions	..	..	52	52
New children	..	..	204	124
Attendances	..	..	409	244
Average	..	..	8	5

## VETERINARY OFFICER'S REPORT

J. Allcock, B.V.Sc., M.R.C.V.S.

(*Inspector under the Diseases of Animals Act*)

### *Notifiable Diseases*

Nineteen-sixty was a disastrous year for the number and extent of the outbreaks in the whole country of foot and mouth disease, swine fever and fowl pest—almost three times the average number of outbreaks of foot and mouth, twice the number of outbreaks of fowl pest and swine fever at the same peak level as the past two years. The City has remained free from fowl pest and foot and mouth disease during the year and only three outbreaks of swine fever have occurred. The national outbreaks have affected the City indirectly:—

### *Foot and Mouth Disease*

Because of the serious spread of foot and mouth disease during November and the presence of infected and contact animals in public markets a Controlled Area Order was made on 26th November, 1960 declaring, amongst other places, Bristol as a Controlled Area. This prohibited the holding of markets except for animals for immediate slaughter; and prohibited all cattle, sheep or pig movements except under licence. This Order remained in force until 10th December, and during this period 329 licences were issued comprising 321 for ordinary animal movements, 3 occupation licences, one licence for breeding purposes and 4 for the movement of inedible offal. The numbers of animals involved were 2,924 cattle, 3,946 sheep and 2,594 pigs. A further complication was provided by the floods in Bath affecting a bacon factory and some hundred pigs consigned there had to be diverted to Bristol and thus licenced, at very short notice. During this dislocation of the normal life of the farming and meat-trading community the greatest co-operation has always been obtained from the vast majority but I would suggest to one or two individuals that 10.30 p.m. on a Sunday evening is hardly a reasonable time to ask for a licence—in fact a recent Magistrates Court decided that 6.15 p.m. on a weekday was not a reasonable time for a Constable to ask to inspect a farmer's Movement of Animals' Register.

### *Fowl Pest*

This disease began to assume epidemic proportions during the Autumn of 1959 and there were fears that a similar or worse position would develop during the Autumn of 1960. The National Farmers' Union sponsored meetings in each County of England and Wales as a result of which, County Fowl Pest Committees were formed in almost every County to organise a publicity campaign designed to prevent the spread of fowl pest by bringing home to the poultry keeper, and all who in their normal work visit poultry farms, the importance of proper hygiene and other management aids. I attended the inaugural meeting in Gloucester and subsequently was appointed to the Committee. The original idea was to have a campaign for six weeks starting on 1st October, 1960 but this has since been modified so that the committee is still in being and functioning. The early results were disappointing at a national level resulting in a drop of only about 25 per cent in the number of cases compared with the corresponding period in 1959. There were no outbreaks in Gloucester however, and none in Bristol.

### *Swine fever*

Swine fever was confirmed on three occasions during the year. One of the cases was in Hotwell Lairs in pigs consigned from Cornwall from an infected herd. The other two cases were on holdings owned by the Corporation and in each case there was a strong suspicion the swill boiling regulations were not being properly observed. Furthermore, in these two cases the general standard of hygiene was appalling. A letter has since been sent to all tenants of Corporation allotments and agricultural holdings emphasising the importance of the *Diseases of Animals Acts* and all other Orders calculated to prevent the spread of infectious disease.

### *Cattle Market*

Nine pig sales were held during the year at which 219 licences were issued for 308 pigs. In my last report I expressed concern at the lack of "policing" of various regulations and the disinfection of cattle lorries was one of the points I had in mind. The Transit of Animals Order 1927 and the various amending Orders require that public transport vehicles shall be disinfected between loads of animals and in any case shall be disinfected before leaving the market. At the Bristol market a charge of 2/- is made to cover the use of water, apparatus and disinfectant. At two consecutive pig sales not a single person paid to disinfect his vehicle. The Chief Constable arranged for an Officer to be on duty at the next few sales to check each vehicle before it left the market and the position now seems to be that every public vehicle is being properly disinfected in Bristol Market at least.

### *Importation of Dogs and Cats Order*

This Order which prohibits the importation of dogs and cats except under licence and after six months quarantine is designed to prevent the introduction of rabies—a most unpleasant, highly fatal disease transmissible to humans by the bite of an infected dog or cat. This disease has not occurred in this country except in quarantine kennels since 1926, but it is endemic in many parts of the world. Only the very strictest observance of quarantine regulations have made this fortunate position in this country possible.

Two incidents at Avonmouth have therefore been very disquieting. On the first occasion a dog owned by the ship's carpenter was found by the Docks police wandering on the quay-side—as a result of this (the Order requires the detention of animals living on a vessel whilst that vessel is in port) the owner was prosecuted and fined £1.

The second incident was much more serious. A seaman took a cat ashore and the cat was finally detained in Brixton, London. The tracing of this cat was due very largely to the efforts of the Avonmouth Docks Police under Supt. Gillespie, and inevitably was an expensive business. I would estimate that the total costs including the final destruction of the cat after it had been transferred to quarantine kennels, exceeded £50. The seaman was prosecuted and fined £1 and £1 10s. Od. costs.

Considering the potential danger to human life caused by this irresponsible escapade and the costs incurred by public funds, I must confess that I feel that the penalty was somewhat light and is hardly likely to help either the Docks Police or myself in our efforts to prevent similar occurrences.

### *Brucellosis*

One possible human case of *Brucellosis* was reported during the year and a dairy herd within the City was possibly incriminated. The farm was visited and milk samples examined by the Public Health Laboratory.

*Sheep dipping*

These regulations are still proving very difficult to enforce satisfactorily, and I am finding that in one or two cases the stockowner seems to imagine that any dip—a Cresol type disinfectant in one case—will suffice.

*Pet Animals Act*

Routine visits have been paid to pet shops and in the case of new licences I have specified the types and numbers of animals that shall be kept in each shop with the existing cage pen or tank accommodation.

*Importation Orders*

Importation Orders have been issued during the year authorising the landing at Avonmouth of three Giraffes, two Oryx, two Duikers, one Dik-Dik and one Bushbuck.

Finally I would like to thank all those who have helped in so many ways—the City Police, the Docks Police, the staffs of all the Corporation Departments, and my own staff.

## CARE OF THE AGED

### Statutory Services

#### *Housing Committee*

Most bed-sitting room and one-bedroomed flat accommodation is occupied by old people and details are given below:

##### (a) *Pre-war Estates*

There are 166 one-bedroomed flats on Bedminster, Knowle, and Southmead Estates; 96 flats, some part furnished, in the Central Area and 62 Council Houses have been converted to provide 124 one-bedroomed and bed-sitting room flats. The rents range from 15/- to 22/6d. a week plus rates and water charges.

##### (b) *Post-war Programme*

By December 31st 1960, 2,149 one-bedroomed and bed-sitting room dwellings, mainly on the Hartcliffe, Stockwood, Withywood, Lawrence Weston and Henbury Estates, had been completed, and another 178 dwellings were being built.

The rents range from 20/- to 22/6d. a week plus rates and water charges.

Of the 36,867 units of permanent housing erected by the Corporation up to 31st December, 1960, 2,567 (6.9 per cent) were bed-sitting room or one-bedroomed dwellings. In post-war building the proportion of these units has risen to 9.7 per cent and of the 1,505 dwellings due to be included in the 1961 building programme 539 (35.8 per cent) are of this type.

#### *Welfare Services Committee*

The Welfare Services Committee is responsible either directly or through the agency of voluntary bodies for providing residential accommodation for persons in need of care and attention; services to handicapped people including the blind and deaf, many of whom are old; safe-guarding the property of people admitted to hospitals or other institutional accommodation; burials or cremations where no relative can assist; and meals to old and infirm people living in their own homes and the provision of club facilities for elderly people.

The details and capacity of accommodation provided under Part III of the National Assistance Act can be summarised as follows:—

100, Fishponds Road*	..	..	550
5, All Saints Road	..	..	18
119, Pembroke Road	..	..	20
159/161, Redland Road	..	..	27
14, Blenheim Road	..	..	21
9, Priory Road	..	..	25
Bourton Grange	..	..	42
“Gleeson House”, Oldbury Court	..	..	46
“St. Peter’s”, Bishopthorpe Road	..	..	46
			—
Total ..		795	—

It is hoped that Snowdon Road, Fishponds, with accommodation for about 200 residents will become available for occupation in 1961.

\* Excludes Temporary Accommodation.

The Department supervises 22 Homes for old people accommodating 554 residents registered under Section 37 of the *National Assistance Act, 1948*, while 66 blind people live in three Homes administered by Bristol Royal Workshops for the Blind.

Advice on health matters is given and administrative health arrangements are made by the Medical Officer of Health on behalf of the Welfare Services Committee and nine general practitioners provide general medical services for the residents of the Council's Homes. The present standard charge for residents is £8 7s. 10d. per week.

#### *Mobile Meals Service*

The mobile meals service is provided on behalf of the Welfare Services Committee by the Bristol Old People's Welfare (Voluntary) Ltd., and the Women's Voluntary Service. During 1960 they provided approximately 500 meals per week.

#### *Health Committee*

The Health Committee is responsible for domiciliary services for many old people including:

#### *Chiropody Service—*

##### *The Development of a Chiropody Service in Bristol*

In 1946, a friendly visitor of Bristol Old People's Welfare reported that an old lady whom she was visiting was unable to cut her very thickened toe nails and had persuaded a gardener to cut them with his secateurs. The old lady later disclosed that her father had died "of blood poisoning in his feet." The local health authority was asked whether old people could attend clinics for schoolchildren which were operating at that time, but, because of the pending implementation of the *National Health Service Act*, the Health Committee of the City Council were unable to undertake a new scheme. Under the *National Health Service Act*, no provision was made for a local health chiropody service, except in those areas where clinics already existed, and Bristol Old People's Welfare therefore attempted to raise funds to start a service. The Soroptimist Club of Bristol made a grant of £150 for an experimental scheme for one year, and a chiropodist who was a Registered Medical Auxiliary started the service in December, 1949. At first a nursing supervisor of the Bristol District Nursing Association investigated patients who were reported to be in need of treatment, but, because nearly all patients were in urgent need of chiropody, this preliminary investigation was discontinued after about six months. At first, patients were seen in chiropodists' own surgeries, but this arrangement proved unsatisfactory both for the chiropodist and for Bristol Old People's Welfare, since few old people kept appointments at the correct time and sometimes failed to attend at all.

Clinic sessions were established in 1950 and the Soroptimist Club renewed its grant each year until 1960 and, in some years, the amount was increased to £200. In addition, financial help was received from the Clifton and Bristol Dispensary Funds for home chiropody treatment, and from the National Corporation for the Care of Old People, who made grants of £200 in 1956, £500 in 1957 and £800 in 1958. It was possible, in this way, to increase the range of the service and, in addition to sessions held in the headquarters of

Bristol Old People's Welfare, four sessions a week were established in the Charlotte Keel and Bedminster Local Health Authority Clinics. In September, 1959, the funds of Bristol Old People's Welfare were exhausted, and the City Council made a grant of £350 to enable the Clinic and Domiciliary Service to continue until April, 1960.

#### *A Local Authority Chiropody Service*

In March, 1959, the Minister of Health announced that he was prepared to approve proposals by local health authorities who wished to establish, or where one already existed extend, a chiropody service as part of their arrangements for the Prevention of Illness under Section 28 (1) of the *National Health Service Act, 1946*. While it was not suggested that the new proposals should contain any formal limitation of the scope of the service, the Minister suggested that at least in the early stages, priority should be given to the elderly, the physically handicapped and expectant mothers.

He hoped that where it was proposed to provide a service in the authorities' own premises, it would generally be possible to make use of suitable existing buildings, such as Clinics, at times when the necessary accommodation was not in use for other purposes. It would also be open to authorities to arrange for treatment to be provided at chiropodists' own premises. Domiciliary visits by chiropodists to patients who were unfit on medical grounds to attend for treatment might be necessary, though, no doubt, authorities would consider whether, in particular cases, it would be more economical to provide transport for the patient concerned. He gave approval to local health authorities providing a service to exercise their power to the making of such charges, if any, as were considered reasonable, having regard to the means of the persons availing themselves of the service provided. The authority was reminded that to qualify for employment, chiropodists must satisfy one or other of the qualifications laid down in Section 3 of the National Health Service (Medical Auxiliaries) Regulations, 1954, i.e. chiropodists must have been employed on the 31st March, 1954, by a Regional Hospital Board, the Board of Governors of a Teaching Hospital, a Local Health Authority, or must have passed the qualifying examination of the Joint Council of Chiropodists or the Society of Chiropodists, after attending a full-time day course of training in chiropody for not less than two years. In Bristol, the Minister approved proposals of the City Council for the establishment of a service which could be provided by any or all of the following methods:—

- (a) by establishing sessions at clinics;
- (b) by agency arrangements;
- (c) by providing a service in patients' own homes;
- (d) by arrangement at the chiropodists' own surgeries or any such other manner as may be necessary.

#### *Developments in 1960*

It was decided to attempt to preserve the chiropody service established by Bristol Old People's Welfare Limited by giving a grant to the voluntary organisation while clinic sessions in their headquarters (10A Whiteladies Road, Clifton), were run down and patients transferred to local health authority clinics more conveniently situated to their own homes. The clinic sessions already held in Corporation Clinics would be extended and the limited domiciliary service to

150 patients preserved. The details of the Clinic and domiciliary sessions commencing from October, 1960, are given below:—

Monday	9.00 a.m.	Southmead Clinic
	1.30 p.m.	William Budd Health Centre
Tuesday	9.00 a.m.	Southmead Clinic
	1.30 p.m.	Charlotte Keel Clinic
	9.00 a.m.	Bedminster Clinic
	1.30 p.m.	Brooklea Clinic
Wednesday	9.00 a.m.	Bedminster Clinic
Wednesday	afternoon	Charlotte Keel Clinic
Thursday	9.00 a.m.	Domiciliary Visits
		Charlotte Keel Clinic
		Clifton Clinic
		Lawrence Weston, Portway,
		Henbury and Verrier Road Clinics
		(on a 4-weekly rota)
Thursday	1.30 p.m.	Clifton Clinic
	Afternoon	Domiciliary Visits
Friday	9.00 a.m.	Charlotte Keel Clinic
	Morning	Bedminster Clinic (alternate weeks only)
	1.30 p.m.	Domiciliary Visits
	Afternoon	Bedminster Clinic (alternate weeks only)
Saturday	9.00 a.m.	Domiciliary Visits
		Charlotte Keel Clinic (as required)
		Domiciliary Visits as required

A charge of 3/- is made for each treatment in a Clinic Session and 3/6d. for each home visit. People who cannot afford to pay these charges are specially considered by the Health Committee, but it is usually found that these fees are reasonable.

Between the 1st April, 1960 and 31st December, 1960, 312 Chiropody Sessions were held in Local Authority Clinics, and 3,022 treatments were given. At the end of the year 1,354 patients were receiving treatment at clinics, as follows:—

Bedminster Clinic	..	..	..	272
Brooklea Clinic	..	..	..	80
Charlotte Keel Clinic	..	..	..	478
Clifton Clinic, Mortimer Road	..	..	..	295
John Milton Clinic, Henbury	..	..	..	22
Southmead Clinic	..	..	..	130
Verrier Road Clinic	..	..	..	16
William Budd Health Centre	..	..	..	61

During the same period 814 visits for domiciliary treatment were made and 237 patients were being treated as at 31st December 1960.

At the end of the year four sessional chiropodists were employed by the Health Committee. Between them, they carried out 13 weekly, 2 fortnightly and 2 monthly Sessions at clinics; two of them carried out domiciliary visits during three days of the week.

#### *Gerontology Clinic*

Dr. R. J. Irving-Bell reports:—

“During 1960 forty sessions for the aged were held on Wednesday mornings at Charlotte Keel Clinic, and 35 people, of whom 4 were new cases, attended. No clinical examination or treatment was undertaken but information and advice were given and home help and other assistance in the home supplied. If required, a visit to the patient's home was arranged.

### *Domiciliary Cases*

Of greater importance in the field of Geriatrics were the home visits made at the request of one of the four special health visitors, general practitioners, public health inspectors, Welfare Department Officers and others.

Two morning sessions per week were allocated for this work. In four out of the thirty-seven new cases visited, implementation of Section 47 of the *National Assistance Acts 1948 and 1951* was necessary. Attendances at Court were required for these, and on several other occasions also when Renewal Orders were made every 3 months for those still needing care in the Residential Homes of the City Council.

### *Self-neglect*

A constant feature found in many of the aged people visited was that of near starvation, the last stage of self-neglect. As a result of chronic undernutrition and malnutrition (a probable intake of under 800 calories daily) the mental powers decline steadily and extreme weakness and apathy result. They refuse all offers of help; and a fatal termination is likely before treatment can be given. This was so in three of the thirty-seven cases which I attended.

### *Preventing Fatalities*

When these recluses are discovered in time, feeding (under supervision) with an easily assimilated high protein food will bring about recovery both mental and physical in a few days. Eight aged women with varying degrees of malnutrition and emaciation were given Complan powder ( $\frac{1}{4}$  lb. daily for 10 days) and the results noted. The powder is easily mixed with cold or warm water to a cream, and is pleasant to take;  $\frac{1}{4}$  lb. = 500 calories. Unfortunately, it was impossible to supervise the feeding in the majority of the cases. But those who took the powder daily showed a mental and physical improvement.

This gain in strength and well-being enabled them to *look after themselves at home*, and with some outside assistance like meals-on-wheels twice a week, made unnecessary their admission to Hospital or Home. The only difficulty with Complan or other food product is, of course, the regular daily administration necessary. If Complan could be supplied ready mixed in bottles or plastic flasks and delivered by the milkman or meals-on-wheels staff to specified houses, I consider that admissions to Hospital and Home would decline fairly rapidly, and the growing percentage of over 65's prevented from becoming "emergencies".

### *Health Visiting Service*

Four health visitors dealt particularly with the care of old people and had a total case load of 5,311 persons, 590 of whom were visited regularly. At the end of 1960, thirty-four people were considered to need admission, as soon as possible, to hospital and forty to old persons' Homes. During the year, 196 convalescent holidays were arranged.

### *Home Help Service*

There were 10 full-time and 566 part-time home helps who assisted 1,992 old and chronically sick people and worked 560,000 hours in 1960 (i.e. 92 per cent of all hours worked by home helps).

### *Home Nursing Service*

There were 78 full-time, 4 part-time and 5 student nurses. During the year, 4,163 people aged over 65 years of age were nursed in 163,602 visits; 60·8 per cent of all patients treated by the district nursing service were aged 65 years

or more. The main types of cases dealt with were cancer; diabetes mellitus; diseases of heart and circulation; gastro intestinal; respiratory and senile. The average cost per patient treated was approximately 5/11d. per visit and £11 7s. 6d. per year.

#### *Laundry Service*

The laundry service provided by the Health Committee continued successfully and it became apparent during the year that additional facilities would have to be provided for dealing with soiled linen at the Disinfecting Station. Upon investigation it was found that it would be more economical for the laundering to be carried out by the Welfare Services Department at their laundry at 100 Fishponds Road. This new arrangement started on 14th November 1960. The Disinfecting Station staff continued the daily service of transport, and soiled linen collected in the mornings is delivered to 100 Fishponds Road by 2.30 p.m. The articles are laundered and ready for collection the following afternoon, thus ensuring a daily service of changing soiled with clean linen.

The extent of the service can be seen in the following statistics:—

1959	8,353 visits	21,637 articles laundered
1960	12,616 ,,"	30,770 ,,"

During 1960, 411 elderly persons were making use of this service.

As in previous years the Health Committee contributed £250 to the Bristol Old People's Welfare (Voluntary) Ltd., towards the laundry service maintained by that organisation.

#### *Local Health Authority—W.V.S. Friendly Visiting*

Members of the Women's Voluntary Services carry out friendly visits to housebound elderly, lonely people, who appreciate this service.

#### *Mobile Physiotherapy Service*

During 1960, 396 patients were treated in a total of 5,752 visits by three physiotherapists. Treatment is recommended by general practitioners and by orthopaedic and other hospital consultants when patients are unfit to travel to hospital for treatment.

Each physiotherapist makes about six visits a day and the cost is estimated at about 13/- per visit. The average amount actually received from each patient is 4/- and the balance is made up by payments by the Ministry of Health for patients referred by hospital consultants. Since January 1st 1960, any patient contributing to the Bristol Hospitals Fund may, on obtaining a voucher, claim 5/- per visit for Physiotherapy Treatment to a maximum of £5 in any one year, this to be paid direct to the Mobile Physiotherapy Service.

#### *Night Watcher Service*

This service completed its fourth year in December, 1960. During the first year, 1957, the number of nights worked numbered 580. In 1960 the number of nights worked numbered 1,285. The payment to the attendant increased in 1960 from 2/3d. an hour to 2/9d.

### Samaritan Fund

At the start of the year the Health Committee allocated a portion (£140) of a legacy received from the late Mrs. S. Wright to the Samaritan Fund. With the appointment of a Head Almoner and an increase in the handling of grants etc., from various sources for the benefit of patients, the Samaritan Fund has been used as a holding account from which grants are dispersed over a period. Consequently income appears for the first time and approximately £6 of the balance was due to patients on behalf of the National Society for Cancer Relief.

	£
Balance at 1st January 1959: ..	96
<b>Income:</b>	
Legacy ..	140
Bristol United Hospitals Fund ..	5
Bristol Royal Hospital Fund ..	8
Bristol Dispensary Fund ..	30
Bristol Comforts Fund ..	5
Bristol Misericordia Society ..	2
National Cancer Relief Fund ..	75
Interest .. .. ..	4
	<b>£365</b>
<b>Expenditure:</b>	
On behalf of various Funds ..	114
Night Watching Services ..	6
Chiropody .. ..	7
Replacement of stolen remittances ..	10
Sheets and Blankets .. ..	6
Boarding Old People's pets ..	4
Fares .. ..	2
Electric razor for loan to heart cases ..	3
Miscellaneous .. .. ..	2
	<b>£154</b>
Balance as at 31.12.60 ..	<b>£211</b>

### Voluntary Services

#### Bristol Old People's Welfare (Voluntary) Ltd.

This voluntary body which receives a grant of £400 from the City Council provides the following services:—

##### *Accommodation:*

*Stratheden* containing 27 furnished “lettings” and guest room for able-bodied elderly people—men, women and married couples. A mid-day meal is provided.

*Dulverton House* containing accommodation for 18 frail ambulant women. There are 4 single rooms and the other residents share cubicled rooms.

*Cote* is similar to Stratheden, but is most suitable for the middle income group. There are 20 unfurnished “lettings” and guest room, for able-bodied elderly people.

*Beverley Cottage* is a Holiday Rest Home for 8 frail elderly people, on the Esplanade, Burnham-on-Sea, where there is a resident warden.

*Friendly Visiting*

Approximately 80 volunteers in the City help with shopping, mending, etc.

*Holidays*

Convalescent holidays subsidised from voluntary funds are arranged for about seventy infirm old people and about 1,250 able bodied elderly are sent for holidays in seaside hotels and guest houses.

*Mobile Library*

Fifteen volunteers take books by van to about 150 old people in their own homes. There is a stock of more than a thousand books and a loan charge of 1d. per week is made.

*Miscellaneous Services*

These services include assistance with clothing; the loan of blankets; wireless for the housebound; the loan of sick room equipment; comforts; advisory service and the distribution of fruit, flowers, firewood, etc.

## **CARE OF HANDICAPPED PEOPLE (ADULTS)**

### **Local Health Authority Services**

The Local Health Authority has a general responsibility for making arrangements for the prevention of illness and the care and after care of persons suffering from illness. These arrangements may include the provision of nursing aids in the home such as special beds, various items of nursing equipment and certain aids to rehabilitation e.g., hoists. They also provide health visitors to give education and help, subject to the general practitioner's wishes, to a patient and his family on the implications of his disease, and home nurses to give any necessary nursing help. In the case of those suffering from mental deficiency or mental illness, there is also a specialised after-care service with mental welfare officers.

Miss M. Moncaster, A.M.I.A. who took up her duties as Head Almoner on the 16th May, 1960, has contributed the following notes:

"Handicapped patients referred for casework services presented a variety of problems but for the majority it has been one of learning to accept a restricted life or the emotional difficulties which have been set up within the family as a direct outcome of the patient's illness.

I have worked in co-operation with colleagues in the District Nursing and Health Visiting fields in helping patients to realize their potential even though limited by disease and to find the solution to practical difficulties.

More intensive case work has been undertaken with those patients whose emotional difficulties have been paramount. As a long term policy all cases are followed up by the health visitors and, where appropriate, those which are not already known to Welfare Services Department have been referred so that they can enjoy the facilities available to handicapped persons".

The Council's Eye Consultant conducts weekly clinics for the examination and registration of blind persons. A close "follow up and liaison service" between the Bristol Eye Hospital Eye Clinic, the Bristol Royal Workshops for

the Blind and the Medical Officer of Health's Department is provided through the appointment of a special health visitor from the Health Department, Miss M. Hatfield, who has contributed the following report:—

"No persons were deregistered during 1960, and the number of blind persons on the list maintained by me now stands at 869 and the partially sighted 275. During 1960, the work followed similar lines to that in previous years. The Clinics for Blind and Partially Sighted people were held weekly and 101 blind and 29 partially sighted persons, including 17 sufferers from diabetes were registered. Twenty-two patients were seen who did not qualify for registration but were in need of optical attention. These were referred to the Bristol Eye Hospital and I arranged their attendance there, on occasions taking them. With adequate treatment and in some instances, a change of spectacles, registration was not necessary. Notifications were received from the following sources:

National Assistance Board .. . . .	64
Bristol Eye Hospital .. . . .	32
Other persons (i.e. health visitors, general practitioners, Clergy, lay persons etc.)	34

One baby who was registered was admitted to a Sunshine Home for Blind Babies, and another has returned home.

Day to day liaison continued between the Health Department, Bristol Eye Hospital and the Home Teaching Service for the Blind.

The follow-up of patients on the Glaucoma and Cataract Register at the Bristol Eye Hospital has continued and many patients have been seen and advised to continue treatment. Constant vigilance and encouragement needs to be given to these patients. There were no cases of retrothalental fibroplasia during 1960.

There is a considerable amount of visiting involved in following-up children suffering from squints. In many cases, of course, the parents take the children regularly for orthoptic exercises but some fail to keep their appointments.

All the services to the blind are provided under statutory requirements, and in their different spheres are subject to inspection and report by the Ministry of Education for educational services to blind persons, the Ministry of Labour for the training and employment of adult blind persons in sheltered workshops, home-workers schemes or in open industry, and the Ministry of Health for all welfare services to the blind."

### **Services provided by Voluntary Organisations on behalf of Welfare Services Committee**

#### *(a) The Blind and Partially Sighted*

The General Superintendent, Mr. E. H. Getliffe, O.B.E., has sent me the following notes:

The Bristol Royal School and Workshops for the Blind were appointed agents for the Bristol City Council under the 1948 *National Assistance Act*.

Their services include the care of children under five years of age through the Home Teaching Service; the education of blind children in Kindergarten, Primary and Secondary Modern classes in the School for the Blind, Westbury-on-Trym, Bristol, where further education and technical training are also provided for pupils from sixteen to twenty years of age; the provision of training for newly blind adults and the employment of trained blind men and women in the Workshops for the Blind, St. George's Road, Bristol.

The Bristol Royal School and Workshops for the Blind administers and supervises the working of the Home Teaching Service and the Home Workers Scheme in Bristol. The service of residential accommodation for blind women training or in employment at the Workshops for the Blind is provided at the Hostel for Blind Women, where a few retired women workers are also resident under the arrangements for accommodation under Part III of the *National Assistance Act*. Three Homes for the Blind have also been provided by the Bristol Royal Workshops for the Blind, affording Part III accommodation to some 65 elderly blind men and women. These services to adult blind persons are provided under arrangement with the Welfare Services Committee of the City Council in fulfilment of the statutory requirements of the 1948 *National Assistance Act*.

The Workshops for the Blind continue to provide employment for suitable blind persons in basket-making, mat-making, circular machine-knitting, hand loom weaving, chair-seating, wire-drawn brush-making and some soft toy making. The light engineering department, which has been developed, is now providing work for 14 persons, including services to severely disabled sighted workers. This development is an arrangement with the Welfare Services and Ministry of Labour. The growth of the light engineering department has warranted a new building and equipment project at a cost of £20,000. The Committee of the Bristol Royal Workshops for the Blind have already spent £12,000 of their capital holdings in establishing and developing the experimental workshop. The new expenditure requirement of £20,000 is being provided from three sources, viz. the Ministry of Labour, Local Authorities, and the voluntary fund of the Bristol Royal Workshops for the Blind.

The Home Teaching Service pays regular visits to all blind persons in their homes, and has established seven very successful social clubs for the blind, which meet weekly in different parts of Bristol. This Service also provides handicraft classes, summer outings, and communal holidays for groups of elderly blind persons. The Service also works closely with the Mental Health Authorities of Bristol, and provides socials and outings for high grade mentally defective selected blind persons from the mental hospitals.

A special development under the Welfare Services Committee has been the provision of a Deaf-Blind Guide Help Service. This is a pilot scheme, initiated in Bristol, and now being developed at the request of the Ministry of Health as an extra and special service to deaf-blind persons.

Statistics for the year 1959-60 show that 9,011 visits were paid to blind persons; 205 lessons in Braille, 264 lessons in Moon type, and 275 lessons in pastime occupations were given by the Home Teachers; 668 visits to the deaf-blind were paid by the special Deaf-Blind Visitor, and 304 handicraft classes were taken by the Home Teachers. Additional to these individual services to blind people the Home Teaching Service organised 20 outings in which over 1,100 persons took part, and 8 weeks of communal holidays in which 244 persons shared the pleasures of such activities. Two socials and two outings for the deaf-blind were arranged, and the main handicraft class had an outing to which 93 persons went. The Home Teaching Service also visits blind persons who are temporarily or permanently resident in hospitals in the Bristol area.

Welfare work connected with partially-sighted persons is carried on through the Home Teaching Service to the blind and partially sighted.

At the 31st December, 1960, there were 78 pupils and 25 technical trainees in the School for the Blind, and 79 employees and 3 trainees in the Workshops for the Blind.

(b) *The Deaf and Hard of Hearing*

The Rev. S. W. Hartnoll, B.A., B.D., Chaplain and Superintendent of the Bristol Institute for the Deaf has sent me the following notes:—

For persons in Bristol who are handicapped by deafness, specialised welfare services are provided under the *National Assistance Act, 1948*. Bristol Institute for the Deaf is the agent of the Corporation of Bristol for this purpose.

Persons who lose their hearing, wholly or partly, after leaving school, are different in mental outlook and in other ways, from those who have been deaf from birth or early infancy. The phrase "hard of hearing", often used in relation to the former class, is a very inadequate description of their handicap. Some of them are totally deaf and some have lost the ability they once had to speak normally.

Social activities are provided for both classes on the Institute's premises, but separately. This is in accordance with the advice of the Ministry of Health (Circular 32/51).

A third main class has recently been identified—the "partially-deaf". This phrase refers to those who have been deaf since birth or early childhood, but who have sufficient hearing to enable them to be educated at a normal school: some of them, at a special unit within a normal school. Their needs are different from those of the other two classes, but should not for that reason be overlooked.

In promoting the welfare of persons who are handicapped by various degrees of deafness, and many of whom are deaf and dumb, the Institute pursues a two-fold aim. First, to help them find a secure place within the normal community of hearing people. Second, to provide for them a comprehensive welfare service, including special facilities for leisure activities, recreation and worship. The two aims do not conflict with each other. Deaf or deafened persons who find recreation, worship and opportunities for services at an "institute for the deaf", are thereby better enabled to find a satisfying place in the normal world.

In addition to the provision of a wide range of social and recreational activities (indoors and outdoors), for persons of all ages, the Institute helps its members in a great variety of ways to overcome a serious handicap. Deafness, defective speech and, in many cases, a very limited knowledge of the English language, raise a grave problem of "communication" between deaf and hearing people.

On 4th February, 1961, the foundation stone of the Institute's new building in King Square is to be laid by Alderman Harry Crook, J.P. The estimated cost of the building is £65,650, towards which the Corporation of Bristol have agreed to contribute £25,000. This new building will be ready for use early in 1962. Bristol will then have one of the finest institutes of its kind in the country.

Numbers on the register, of persons living in Bristol on 31st December 1960, were:—

Deaf over 16 years of age .. ..	291
Deafened over 16 years of age .. ..	287
Deaf and Partially-deaf children .. ..	92
 Total .. ..	 670

## CIVIL DEFENCE RESPONSIBILITIES OF THE MEDICAL OFFICER OF HEALTH

Dr. H. Temple Phillips

(*Chief Assistant Medical Officer of Health*)

and W. J. C. Winterson

As foreshadowed in the previous Annual Report, the results of the various Working Parties that had been considering the re-organisation of the casualty services, became evident with the publication of a circular from the Ministry of Health on their new proposals.

It was decided to change the name of the Ambulance & Casualty Collecting Section of the Civil Defence Corps to Ambulance & First Aid Section, and to form within the Section First Aid Parties in place of the present Casualty Collecting Parties. The Council was asked to put in hand the re-organisation of the Section and to plan for its combination in war with the Ambulance Service, making the appointments called for by the new organisation as suitable candidates become available.

The basic units of the Ambulance & First Aid Section will be the Ambulance Detachment and the First Aid Party. These will be formed into Platoons and Companies, which will make up an Ambulance Column under the command of a Column Ambulance Officer and Deputy, who will have at their disposal 72 ambulances, 18 personnel/equipment vehicles and some 334 personnel. The Column is designed to meet the requirements of a Forward Medical Aid Unit to maintain a regular flow of casualties from the forward area to the F.M.A.U. and thence to hospitals.

Acting in consultation with the Regional Director, the Authority should now draw up plans for the re-disposition of ambulance services in war, taking into account the need to co-ordinate with the plans of the hospital authorities for the provision of emergency hospital accommodation.

In due course the Regional Director will be notifying the Council as to the war duty establishment of the Ambulance & First Aid Section. Meanwhile, it appears that the existing arrangement whereby units meet in various parts of the City, whether for training or social purposes, must continue. The composition of the units and the type of training being undertaken, must enable them to take their place in an Ambulance Column.

Prior to the introduction of the new organisation, a number of studies were organised at the Civil Defence Staff College, to enable Chief Ambulance Officers to consider the practical problems arising therefrom, and these were attended by Mr. R. F. Wood.

Dr. J. F. Skone, the Deputy Medical Officer of Health, also attended the Staff College in May, when a study was held to consider plans for the Hospital and First Aid Service and the tactical role of Medical Officers of Health in wartime.

Two voluntary members of the Ambulance Section, Mrs. I. Terry and Mr. A. Davis, attended special Officers' Courses at the Home Office Training School, designed to acquaint personnel with their duties and responsibilities in an emergency.

Various exercises, designed to introduce the Officers and members of the Section to the new organisation, took place during the year. Many of these concentrated on convoy work and brought out the salient points of road movement control. This training culminated in a full-scale exercise entitled "More Reliance", organised in conjunction with the Home Office, Ministry of Health and Regional Hospital Board, which took place on Sunday, 25th September. The exercise was concerned primarily with testing arrangements for casualty clearance in the event of an emergency. The assumption was that a nuclear weapon had been exploded in North East Somerset, causing extensive damage throughout Bristol and Bath. Ambulance Units were called in from Devon, Cornwall, Somerset, Gloucestershire and Wiltshire. The military were also called upon to help cope with the flood of casualties.

A column of 70 ambulances assembled at Patchway and was despatched to a number of casualty loading points in Bristol. A thousand volunteers had made themselves available as casualties and, after loading, the ambulances were directed to a Forward Medical Aid Unit staffed by members of the National Hospital Service Reserve, which had been set up at the T.A. Drill Hall at Horfield Common. A mobile radio and telephone control unit directed ambulances to the required points and provided a vital link in the system of control.

A well deserved tribute must be paid to the public health inspectors, who not only assessed the hygiene and sanitation requirements for the exercise, but also laid on a first-class practical demonstration of field sanitary appliances.

The exercise was described by the Regional Director as "highly satisfactory."

The Ministry of Health intimated that it was their intention in future to provide training ambulances by the central purchase of new vehicles. In October the Ministry confirmed that one such vehicle had been allocated to Bristol and it has since been delivered and is now in service. It is a box-type van body mounted on a Ford "Thames" 10/12 cwt. chassis, fitted with two sets of stretcher gear. The Minister proposes to call for a report in due course on the use of the vehicle for the training of volunteers and its suitability for such training.

During the latter part of the year structural work took place to the existing garage accommodation at St. John's Lane, Bedminster, as a result of which the fleet of nine Civil Defence ambulance vehicles are accommodated there under cover. Office and store facilities are also available for the full-time Instructor and Driver/Storekeeper.

The Ministry of Health offered Local Health Authorities the opportunity of acquiring on loan a stock of stretchers. These are not available for training purposes, but can be used in the event of a major peacetime disaster. Two hundred stretchers have since been received and have been placed in store.

The Annual Competition for the Ambulance & First Aid Section took place on Sunday, 29th May, at the Civil Defence Training Ground at Netham. Teams were entered by each of the six Units and each team comprised an ambulance crew and a first aid party. In the team test a survey had to be made of an incident, first aid rendered, and the removal of casualties by ambulance to a Forward Medical Aid Unit organised and carried out. In addition there was an oral test for each member of the team.

The winning team came from Bedminster, with St. George as close runners-up.

Dr. H. Temple Phillips presided at the presentation of awards that took place at the close of the competition. The Ambulance Cup and prizes to the winning teams were presented by Major-General C. F. Watson, Principal Regional Officer, Ministry of Health, who congratulated all the members of the team taking part on their splendid performance.

Driving instruction continued for members of the Ambulance Section, but was principally confined to those who had previous driving experience. Driving Warrants were issued to 18 successful candidates, authorising them to drive Civil Defence ambulance vehicles.

Ten classes in First Aid and four classes in Home Nursing were organised for all sections of the Corps and were attended by some 250 members. At the subsequent examinations arranged with the St. John Ambulance Association and the British Red Cross Society, certificates were awarded to 180 successful candidates.

## HEALTH EDUCATION

P. Mackintosh

(*Health Education Officer*)

### “Inoculation Year”

Late in 1959 it was decided that during 1960, every effort should be made to improve the level of all protective inoculations among the City's residents. Although the City's figures for most inoculations were above the national average, it was felt that there was an increasing apathy towards diphtheria, whooping cough and tetanus immunization, with national propaganda putting most of the emphasis on vaccination against poliomyelitis.

As a good deal of preparatory work would be necessary to organise an intensive campaign, “Inoculation Year”, did not start until Monday, 1st February, 1960.

#### *The Campaign*

In the weeks preceding the opening date as many responsible persons as possible were informed of the “inoculation state” and what steps we proposed to take to improve the position. All general medical practitioners were informed through the medium of the Monthly Bulletin of the Medical Officer of Health. After discussions with all Medical Officers of the Department, a memorandum was sent to all Sections of the Health Department explaining the aims and intentions of the campaign and how individuals could help.

The support of the general public was enlisted by a variety of means. Letters to the heads of Churches of all denominations asked members of the clergy to bring their influence to bear on their parishioners. The help of more than 120 women's organisations and many men's organisations was sought also.

The campaign was opened by articles in all three local newspapers, coupled with a broadcast by the Medical Officer of Health, a recording of which was repeated on the following day by the B.B.C. During the opening weeks articles on infectious diseases and preventive measures, appeared in the “Civic News” and the “Unicorn”—a N.A.L.G.O. publication. Copies of a special poster designed by a Clinic Superintendent were produced and distributed to all Clinics and Infant Welfare Centres, general practitioners waiting rooms, all hospital out-patients' departments, over 140 public notice boards, housing estate offices and notice boards, cinemas, the City Information Bureau, Police Stations, several of the larger stores, youth clubs, the office of the Registrars' of Births and Deaths, Gas and Electricity Show Rooms, public libraries, football and other sports clubs' pavilions, swimming baths and the Territorial Army Drill Halls.

Fifteen cinemas projected either a slide or filmlet concerning diphtheria immunisation and appropriate leaflets were distributed with welfare foods. An announcement was given out over the public address system during the local “Football Derby” between Bristol City and Bristol Rovers.

Later in the year further press publicity was used and additional propaganda material distributed. In September, at the Annual Flower Show, an exhibition on the subject of “Infectious Diseases” was held, the stand being staffed by health visitors.

#### *Mobile “Clinic”*

Several other methods were used in an attempt to induce members of the public to protect themselves and their children. Health visitors were asked to delineate areas in the City where it was known that the proportion of children

adequately protected, was low. Two areas were defined, in Kingsdown and Southmead. In each of these areas, health visitors conducted an intensive door-to-door campaign, telling parents that a mobile clinic would soon be visiting the area and their children could be inoculated without having to visit a Clinic. Later a van equipped with a public address system toured each area, and public "reminders" were announced just prior to the arrival of the mobile "Clinic"; this was a converted motor coach, kindly provided by the Transport and Cleansing Department. Mothers in the area brought their children along to the coach where the children were given the necessary inoculation. In those instances where mothers were reluctant to come health visitors went to the houses and with a little encouragement, the mothers and their children were brought along to the "Clinic".

#### *Evening Clinics*

Evening sessions for vaccination against poliomyelitis have been held at Central and Granby House Clinics for some time. Many people who either work or pass through the areas served by these Clinics have been vaccinated at these evening sessions. However, many people living on the peripheral estates find it inconvenient to attend these Clinics. It was decided that as an experiment, we should try to cater for these by holding evening sessions on one of the estates. Henbury Clinic was selected and for several weeks, intensive propaganda was conducted on the estate by everyone working at the Clinic. All shopkeepers displayed posters announcing the time and date of the sessions and all buses serving the estate carried appropriate streamers. Despite all these efforts only 44 people attended, many of these being husband and wife. In view of this poor response and of the many other commitments of the staff, the evening session at Henbury was discontinued.

#### *Visits to Factories and Shops*

Just after the "Year" started the Ministry of Health increased the age range up to forty for persons eligible for vaccination against poliomyelitis. Arrangements were rapidly made to cope with the hoped for "rush"; special evening sessions were arranged at Granby House and Central Clinic and large quantities of publicity material, supplied free by one of the drug houses were distributed to all these sources previously listed. In addition, with the co-operation of the Chamber of Commerce many hundreds of business concerns were offered and accepted propaganda material. Some examples of how this material was used were, chemists who put wage packet slips in wrapped prescriptions, petroleum distributing companies handing out car streamers to their customers, the large brewery companies displaying posters in their public houses and off-licences.

With the new age group eligible, it became necessary once more to offer managements vaccination for members of their staff on their own premises. In this way several thousand employees have received their injections; altogether the personnel of 24 factories have received 3 injections, two have had two injections and in 6 cases, the firms' own medical staff have given the injections.

Considering the amount of time and material that was put into this campaign, one would have hoped to have been able to announce a great improvement in the protective state of the population. In the main the figures at the end of the year were disappointing. So far as the children under five were concerned, there were increases of between three or four hundred only, over the previous year, in respect of diphtheria, tetanus and whooping cough. Booster doses for children under 15 years showed a more promising increase: for diphtheria immunisation, the figure was 9,634 compared with 1,756 in 1959.

In this same age group the increased number for whooping cough immunisation was 3,857 as against 1,507 in 1959 and for tetanus the figures were 2,774 in 1960 and 629 in 1959.

It would appear that people just cannot be bothered to visit the clinics to have themselves and their children protected. On the other hand if the parent is asked to sign a consent form and the child is immunised at a session held at school, then nobody is inconvenienced except the members of the medical team and the exasperated schoolteachers. It is a sad reflection in this "do it yourself" age, that so many people are not prepared to carry out simple tasks of maintenance of their most priceless possession—health.

The story is the same with vaccination against poliomyelitis of the older age groups—a trickle of people to the clinics, but take the vaccine to the place of work and get vaccinated "in the firm's time" and you get a much better response. One gets the impression at times that we are asking some members of the public to "do us a favour" by being protected against disease. Propaganda and publicity, such as a Health Department can provide seems unable to surmount the barrier of indifference, the attitude of "it won't happen to me". From past experience it seems that fear is the most powerful propaganda weapon: no amount of publicity or personal advice by doctors and health visitors will otherwise penetrate the hard core of resistance.

### Films and Film Shows

The two films "Marlborough House" and "Claremont", made for the Department by Bristol Cine Society have continued to be in great demand. Copies are hired out not only in Britain, but on occasions to Continental countries as well. Copies have been sold to the B.M.A. Film Library, the British Film Institute, a medical film library in Sweden, the British Film Library in the Netherlands, and the Department of Preventive Medicine, University of Brisbane, Australia. During the year "Claremont" was entered for the B.M.A. Annual Film Competition and won a Silver Medal Award—the top prize in its class; this film also won the Daily Mail Challenge Cup in the London Amateur Film Festival, and was shown on A.B.C. and T.W.W. Television.

The third film in this series was completed during the year. Entitled "The Helping Hand" this film shows the provisions made for other handicapped children—the blind, the deaf, the physically handicapped and the educationally sub-normal. Once again, Bristol Cine Society were responsible for the production and we were very fortunate to have the services again of Mr. Philip Grosset, as cameraman.

The number of film shows given was again a record; 382 screenings were arranged, and this we were better fitted to do than in early years, because in the late Autumn the Health Committee agreed to the purchase of a second Bell & Howell Film Unit.

### Talks

The Health Education Officer once again gave a series of lectures to D.P.H., Health Visitor Students and District Nurse Students. Special lectures were given to R.A.F. personnel and to a group of officers of the R.A.M.C. Talks were also given to several women's organisations, the Association of Nursery Nurses, students of Redland Training College, and the Sixth Formers of Clifton High School.

At the request of the P.T.A. of Brislington School, a series of talks was organised on sex education and child health. The talks were "The Need for Sex Education" by the Rev. A. H. Birtles, B.A.—a Marriage Guidance Coun-

sellor; "Plain words & Sex" by Dr. Elizabeth Townsend,—a general practitioner; "Health Education in School" by J.S. Hellier, B.Sc.,—Headmaster; "Children's Ailments," by Dr. M. B. Lennard—a general practitioner. The final session was entitled "Any Questions" and the panel included all the above speakers, Dr. Smallwood and myself. The series was quite successful and served a useful purpose; it is probable that similar talks will be given to other Parent-Teacher Associations.

In addition to the above, many hundreds of talks were given by medical officers, health visitors, midwives and public health inspectors, and the Environmental Hygiene Section carried out an extensive programme of education.

Courses for school leavers were again arranged at Connaught Road, Marksbury Road and Speedwell Girls Schools; a special study day on "Home Safety" was conducted by two members of the Home Safety Council's panel of speakers at Redfield Girls' School and a special course of talks and visits were arranged at Brislington County Secondary School for pupils studying for their U.E.I. Certificate. Advice and assistance were given to many teachers from other schools, as well as students and individual pupils.

### **The Bulletin of the M.O.H.**

The Bulletin of the Medical "Officer" of Health continued its success as a medium of health education. Some indication of its popularity may be shown by those general practitioners who, when they change their accommodation, take time to write or 'phone and ask us to send "The Bulletin" to the new address. The monthly mailing list now exceeds 800 copies and this number includes many schoolteachers. In fact, there appears to be a real need for a special bulletin to be prepared for schools. Such a bulletin could be issued once each term and might contain two or three leading articles dealing with child health, a review section of health education material e.g. films, film strips, charts, books, leaflets etc., and perhaps a section dealing with teachers' questions, or even contributions from teachers themselves.

### **Health Education Committee**

In December, the first meeting was held of a new Health Education Committee. Members of this Committee are five health visitors elected from different parts of the City. Dr. M. Gibson, First Assistant Medical Officer, Miss A. Rowbottom, Deputy Chief Nursing Officer and myself.

The aims of this Committee are to encourage the development of health education among all members of the Department, review and "vet" new material and discuss and promote any new ideas or schemes put forward by district health visitors. Already, a series of study days have been prepared for 1961.

### **Visitors**

During the year, a record number of visitors were welcomed to the Department. Fifty-four doctors, nurses, health education lecturers and social workers from many countries spent some time in the Department. In addition, 32 doctors, from many countries, who were studying for their D.P.H. at the London School of Hygiene and Tropical Medicine, visited Bristol and were shown something of the work of a local health authority and the hospital services, in an intensive study day organised by this Department and Professor Neale, the Professor of Child Health in the University of Bristol.

From the 22nd to 24th June, the Annual Conference of the National Association of Maternal and Child Welfare was held in Bristol. Some 500 delegates from all parts of the country attended.

## Home Safety

The activities of the Bristol Home Safety Council are outlined in the two six monthly reports which are presented each year to the Health Committee.

*1st January—30th June, 1960*

### *New Chairman*

At the Annual General Meeting in January, Mrs. G. M. Pearson, M.B.E. representing the Association of Hospital Matrons, was elected unanimously as Chairman of the Council and Committee. Mrs. Pearson has been a member of the Home Safety Council since its foundation in January, 1957.

Alderman Mrs. A. E. Nutt was unanimously re-elected Vice-Chairman. Members of the Home Safety Council would like to record their appreciation of Mrs. Nutt's work as Acting Chairman during the last 6 months of 1959.

### *Annual Home Safety Competition*

In memory of the late Chairman, Mrs. E. M. Boyce, individual members of the Council, as well as representative groups, subscribed towards a fund raised to provide some form of annual award for home safety activities. A beautiful silver rosebowl was purchased and inscribed with the words "The Ethel Boyce Memorial Rose Bowl, awarded by Bristol Home Safety Council". This form of award, it was felt, could be offered for competition by persons of all age groups and of varied interests.

The 1960 Competition was organised by the Nursery Schools Association in the form of a project competition for the infant schools, and a poster competition for nursery nurses and students. The response was most gratifying, 15 infant schools submitting an exhibit as well as 92 posters entered by the nursery nurses and students. All entries were displayed in the schools' exhibition room at the Museum and remained on show to the public for 10 days. The Lord Mayor, Alderman Cozens, opened the exhibition and presented the rose bowl to children from the winning school, Novers Lane Infants' School. In the poster competition three entries were regarded as outstanding, three were judged first-class and three were highly commended. The Nursery Schools Association provided winning certificates and contributed three guineas towards the prizes and the Chairman donated a further two guineas.

The competition and exhibition were highly successful and received very good press reports in our local newspapers. The Home Safety Council would like to record its appreciation of all the work put into this venture by the Nursery Schools Association and by the competitors themselves.

In 1961, it is proposed to offer the memorial rose bowl for a competition to be organised by the Young Wives' Group of the Mothers' Union.

### *Oil Heaters*

The Home Safety Council records with a certain degree of satisfaction that the Government has, during the past six months, taken steps to ensure that certain oil heating appliances will in future have to conform with statutory safety standards. The Council notes with approval that the Children's Committee recently circulated 600 foster parents in the City, warning them of the dangers of such appliances and drawing their attention to safety precautions to be taken. However, unmodified heating appliances are likely to continue in use for some time and the Council intends to continue its safety campaign in this matter.

The Council is particularly concerned with the use of certain oil heating appliances by the West Indian community in the City. Talks have been held

with Mr. Gregory, the West Indian Welfare Officer, and it has been agreed that one measure to be adopted will be to supply those Health Visitors, who have West Indian families in their districts, with photographs showing oil heaters actually "flaring". These photographs were taken and supplied by officers of the Fire Brigade. In addition, the Chief Fire Officer provided a list of safety precautions to be observed with oil heaters and copies of this have been given to all Health Visitors, District Midwives and District Nurses, who, armed with these photographs and information will be better fitted to advise on safety measures to be taken.

#### *Safety Devices—Gas Appliances*

Following discussions with the South-Western Gas Board, a meeting of Health Department and Welfare Services Officers was held at Radiant House, on the 29th February. The South-Western Gas Board arranged a demonstration of the latest safety devices incorporated in gas equipment as well as equipment designed for handicapped people. The meeting was held primarily to discuss safety in the use of gas appliances used by old people and all the representatives present agreed to co-operate with the Gas Board in providing information of elderly people living alone who would receive regular visits from gas maintenance fitters to ensure that their gas appliances were safe.

A report of the meeting was prepared, containing details of the appliances and services demonstrated and this was circulated with the Medical Officer of Health's Monthly Bulletin to all doctors in the City. Copies were also issued to Health Visitors for whom two demonstrations were later arranged by the Gas Board.

#### *Pram Safety*

Early in the year, the Council's attention was drawn to a request for information on the safety of perambulators. The information was asked for by the Women's Advisory Committee of the British Standards Institution. The Health Visitors were asked if they were concerned about the number of "pram accidents" and also for their observations on the possible factors involved.

From their replies it was revealed that the number of accidents in which prams were involved were relatively few and were usually caused by carelessness or overloading, e.g. a toddler sitting on the rear of the pram, or a heavy shopping basket placed near the infant's feet. It was generally agreed that the design of the modern pram was not very satisfactory from a safety standpoint and the following suggestions were made:—

- (a) Harness straps should be sold as part of the pram and not left to be purchased at a later date when the infant was becoming very active.
- (b) Most modern prams were considered to be too shallow so that an energetic baby, if not strapped in, could easily topple over the side.
- (c) All prams should be fitted with some form of drop-down legs at either end, to prevent tipping when stationary.

These views will be made known to the British Standards Institute. It may be remembered that about 2 years' ago following a complaint to the manufacturers, about the design of a tricycle, later models showed a marked improvement.

#### *"Haphazard House"*

This electrically operated exhibit continues to be put to good use. Apart from its use in Clinics it has recently been displayed at North Somerset Agricultural Show on Whit-Monday and, in June, it was on display at the British

Medical Association's Pharmaceutical and Scientific Exhibition at Torquay. It was one of the exhibits seen by the Duke of Edinburgh when he officially opened the Exhibition.

#### *Film—"Fabrics and Fireguards"*

The home safety film "Fabrics and Fireguards" has been used on a number of occasions during the past 6 months. It has been shown at some Infant Welfare Clinics, to Health Visitor students and some women's organizations in the City. For two weeks during April, it was borrowed by a large store in Bristol, and shown daily at a Consumer Research Fortnight. On each occasion the film was followed by a demonstration of flame-resistant fabrics. The Home Safety Council feels that this film will help considerably in making the public more aware of these fabrics and help to create a demand for the materials.

#### *Area Meeting*

The second Area Meeting was held on 16th May when representatives from Bristol, Cheltenham, Swindon, Salisbury, Wilton and Street met for discussions on present and future activities.

Among other business, it was agreed that meetings should be held quarterly, just before the National Home Safety Committee meetings, so that the Area Representatives could be thoroughly briefed before attending the National Committee.

It was agreed, too, that Area Meetings should take place in different towns where facilities were available for such meetings.

#### *Home Safety Talks*

During the 6 month period, members of the panel of speakers gave 29 talks and demonstrations on the prevention of accidents in the home.

#### *Water Safety*

The summer campaign has been devoted to the prevention of accidents by drowning. Suitable posters have been distributed to all schools in the City as well as to the City's Swimming Baths. The Baths Department have also co-operated by offering for sale the new Water Safety Code. The three local newspapers have again been generous in their support, and their publicity has, as always, been excellent.

#### *Membership*

Two new organizations have recently joined the Home Safety Council. They are the Bristol and District Ironmongers' Association—members of which have earlier helped us in our campaigns, and the Joint Women's Section of the Labour Party.

The total number of organizations—statutory and voluntary—now represented on the Home Safety Council, is forty-five.

#### *Acknowledgements*

Members of the Home Safety Council would like to record their appreciation of the continued support and interest of the Health Committee and to thank, once again, those many individuals and organizations who are so ready and willing to help in the continuous campaign to prevent so much unnecessary suffering and death caused by home accidents.

*1st July—31st December 1960*

#### *Broken Glass*

During the last week of July, a window display was arranged in the Information Bureau. The display dealt with the dangers associated with broken glass, particularly by the indiscriminate disposal of bottles on the beaches and in the parks and countryside.

#### *National Home Safety Committee*

In July, the Assistant Secretary of the Home Safety Council attended the quarterly meeting of the National Home Safety Council. It was announced that the Royal Society for the Prevention of Accidents was hoping to draw up a syllabus of home safety for the Scout and Guide movements, as a basis for a proficiency badge test. It is worth recording that for some time now, the Home Safety Council in Bristol has given considerable assistance to local Cub groups. More recently too, assistance has been given to groups of St. John Ambulance Nursing Cadets, in training the cadets in home safety.

Two resolutions were put forward by the South-Western Area to the National Home Safety Committee. It has now been decided that the time devoted to home safety during the National Safety Congress will be increased from half a day to one whole day; the timing of National Home Safety Week will be reconsidered in view of its nearness to the Guy Fawkes celebration and the beginning of Christmas publicity in the large stores and shops.

#### *Flower Show*

Once again, free space was allocated to the Home Safety Council at the Annual Flower Show on the Downs. The model "Haphazard House" used the year previously was again displayed, this time with a garden attached. In the garden the "Haphazard Family" were shown involved in a whole chapter of accidents. The unit aroused a good deal of interest and the members of the Townswomen's Guilds and the Mothers' Union, who staffed the stand, took the opportunity of distributing literature and answering many questions.

#### *Area Meetings*

Two Area Meetings were held during this latter half of the year. On 29th September, 1960, Alderman Mrs. Nutt, Vice-Chairman of the Home Safety Council, and Miss Finch, Assistant Secretary, attended an Area Meeting at Swindon. Delegates from five other Home Safety Committees were present and they were welcomed by the Mayor of Swindon who remained afterwards for the business meeting.

On the 8th December, 1960, an Area Meeting was held at Wilton. Here again, delegates from four Committees were greeted by the Mayor of Wilton who remained for the rest of the meeting. Members of the Press attended the meeting and it is understood that good publicity was given to the Committees' activities.

Delegates were unanimous in agreeing that a great feature of these Area Meetings lay in stimulating the activities of the local committees and in rousing the interests of those authorities where no home safety organizations existed; in this respect it was felt that such authorities might well be invited to send representatives to future Area Meetings, to encourage the establishment of more Home Safety Committees.

### *Annual Home Safety Competition*

The Ethel Boyce Memorial Rose Bowl has been offered for competition in 1961 to the Young Wives' Groups of the Mothers' Union. The competition is to take the form of a drama festival, the "playlets" to be performed being concerned with home safety; these will be written, produced and performed by the members of the Groups.

### *General*

It is difficult to assess the results of the work of the Home Safety Council at this stage; the Council has been in existence only four years, but one gets the impression that people are becoming more safety conscious. However, it was most encouraging to read in the Medical Officer of Health's Statistical Review for 1960 that "there has been a welcome fall in deaths due to all forms of accidents—from 115 to 89, of which only 36 were home accidents. It would be gratifying to claim some credit for this, but the Home Safety Council has not been in existence for a long enough period to assess the results of its activities. Like all health education, results can only be seen over a fairly long period of time; health education in all its aspects is largely an exercise in persuasion, and this takes time.

In concluding this Report, we should once again like to record our appreciation of the continued support of the Health Committee and all the many organizations and individuals who are always ready to help in this work. The Press continues to give us a good deal of publicity and articles on the prevention of home accidents appear frequently and are always well presented.



SECTION F

SCHOOL HEALTH SERVICE

ANNUAL REPORT

OF THE

PRINCIPAL SCHOOL MEDICAL OFFICER

R. C. Wofinden, M.D., B.S., D.P.H., D.P.A.

A. L. Smallwood, M.D., D.C.H., D.P.H.

*(Senior Medical Officer, School Health Service)*



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## INTRODUCTION

### To the Chairman and Members of the Education Committee

I have much pleasure in presenting the Annual Report of the Bristol School Health Service for 1960, the 53rd Report of the series.

The general health of the children of the City continues to be good. The provision of clinic facilities in the outlying areas of the City has continued, and the Amelia Nutt Clinic was opened during the year to serve the growing housing estate at Withywood on the southern outskirts of the City. This is a joint clinic similar to others that have been erected in various parts of the City and provides medical and dental services for children of the district, together with an ear, nose and throat service, as well as providing services for mothers and young children, including the usual maternity and child welfare services.

A re-arrangement of the Child Guidance Clinic services was made during the year. Hitherto the service has operated from central premises at Brunswick Square near the centre of the City. The Health Committee have for some time been conducting a Family Guidance Service at some of the outlying clinics, and it was felt that since the two services were doing much the same work for different ages of patients, there was much to be said for an integration of these two services. It was agreed therefore that the two services should be integrated at a functional level, and this integration was brought into operation in October. It seems to have worked extremely well, and has enabled Child Guidance Clinic facilities to be taken to several of the clinics on the outskirts of the City, much to the advantage of the parents concerned (page 3).

In his report on the Dental Service, Mr. J. McCaig, the Chief Dental Officer, again comments on the staffing difficulties. At the time of going to press, however, there has been some slight improvement in the dental staff position, and it is hoped that the salary award which was made to take effect from December, 1960, will encourage recruitment to the service. Mr. McCaig also mentions an interesting experiment which took place in one of our schools to try to encourage the sale at school tuck shops of such things as apples and dried fruits rather than sweets and biscuits so as to try and reduce the amount of dental decay in school children (page 8). A fuller account is given of this exercise by Miss Chapman (page 37).

Both Mr. Fairman and Dr. Gibb refer to the development of the hearing assessment work, which is still unfortunately hampered by lack of teachers of the deaf, willing to work in the City. Dr. Kaye (page 13) refers to his experiences with the enuresis alarm and considers this to be a useful method of treatment with children who suffer with enuresis, particularly for children between about seven and twelve.

Reference is made (page 32) to the epidemic of infectious hepatitis, which took place throughout 1960 and towards the end of the year showed no sign of diminishing. It was possible to offer a certain amount of protection to adults of special risk groups, but it is not possible to say how much effect this measure had. Control is particularly difficult in a disease which has so long an incubation period, but opportunity was taken to revise the methods of hygiene treatment of lavatories, etc., in schools by caretaking staff, and the advice given is recounted on page 33.

A brief reference is made to the medical inspections which have been started at the College of Science and Technology on a voluntary basis, at the request of the College, on page 35. Mr. Saunders offers advice on the interpretation

of the "I.Q." test and the principles involved in recommending the placement of a child in a special school or class on page 41. A very interesting account is given by Dr. Macara (page 52) of his experiences at a new bilateral school where he has been doing all the traditional medical work, and in addition taking part in health education activities of various sorts. Miss Cooke continues her account of the investigation into school accidents (page 57) and reference is made (page 56) to the three films that have been made by the Bristol Cine Society about handicapped children in Bristol. The first "Marlborough House" refers to the mentally handicapped persons, the second "Claremont", refers to cerebral palsied children and the third "The Helping Hand", which was made during 1960 deals with the difficulties of some of the other sorts of handicapped children.

We are fortunate in the City in having good relationships with the hospitals and General Practitioners, and the efficient running of the service depends to a large degree on this excellent collaboration. We are grateful also to Mr. G. H. Sylvester, the Chief Education Officer, and his staff, the teachers and school welfare officers for their continued help in very many ways, which affect the health of the school children in the City. A happy relationship is enjoyed with the Heads and Staffs of the schools who assist in many ways the work of the School Health Service.

I should also like to record my thanks to Dr. A. L. Smallwood, the Senior Medical Officer of the School Health Service, for his help in preparing the Report, and once again I should like to express my appreciation of the work of Mr. Middleton in assembling and editing the contributions to this Report.

R. C. WOFINDEN,  
*Principal School Medical Officer.*

**CHILD & FAMILY GUIDANCE SERVICE**

R. F. Barbour

**Changes of Staff**

Mr. Dunham and Mr. Hickish, Educational Psychologists, joined the Clinic Staff in January 1960, to fill the increased establishment of 6 psychologists. The Senior Assistant Psychologist, Mr. King left on 29th February, 1960 to take up a post in Berkshire, and Miss E. J. Horn was appointed in his place. To fill this vacancy, Mr. K. Wedell was appointed on the 2nd August, 1960.

Dr. Helen Mathewson replaced Dr. W. Johnson as part-time Registrar, in May 1960.

Mrs. J. Scrine, part-time Psychiatric Social Worker, resigned in August 1960 as her family was moving to the Channel Islands.

The clerical establishment was increased by one clerk in September 1960.

**Annual Statistics**

<i>Psychiatric</i>		<i>1959</i>	<i>1960</i>
Diagnostic interviews ..	.. .. .. ..	352	511
Physical examinations ..	.. .. .. ..	339	485
Treatment interviews ..	.. .. .. ..	1,354	2,135
Parent interviews ..	.. .. .. ..	96	203
Others interviewed ..	.. .. .. ..	8	85
<i>Psychologists</i>			
Examinations, including Juvenile Court cases ..	..	603	594
Treatment interviews ..	.. .. .. ..	934	1,468
Parent interviews ..	.. .. .. ..	117	260
Others interviewed ..	.. .. .. ..	29	77
Other visits ..	.. .. .. ..	119	128
<i>Social</i>			
Interviews with parents ..	.. .. .. ..	2,141	3,654
Interviews with others ..	.. .. .. ..	10	244
Home visits ..	.. .. .. ..	294	662
Other visits ..	.. .. .. ..	1	43

The following is a report by Dr. H. S. Coulsting, Consultant, on the peripheral clinics:

*Peripheral Aspect*

As had been anticipated the volume of work at the peripheral clinics has shown an enormous increase and in some areas there is a waiting period of up to three months before cases can be seen and a considerable delay before treatment can be undertaken; however, some improvement in this situation is hoped for when extensions of the premises will make it feasible for the staff to devote more time to these areas. The realisation of this will, of course, be dependent on the availability of skilled staff who are in short supply throughout the country. It is likely, however, that this City with its progressive attitude towards mental health will have much to recommend it to suitable persons in this field of work.

Another interesting and most important feature of the referrals is the slowly growing tendency to refer children of under 5 years of age and in some clinics the proportion of under 5's referred now constitutes some 25% of new referrals. This reflects great credit on the psychiatric social workers and health visitors in these areas and shows that the root causes of mental ill health are being more adequately appreciated. Much of the work done with this group, of necessity falls to the psychiatric social workers, as treatment in this age group is largely performed with and through the parent. This tendency to refer problems in this age group is most encouraging and the fruits of this work should be shown in better adjustments in later years.

Other functions of the personnel in the peripheral clinics are regarded as of paramount importance for the future. Although they are not readily demon-

strable in the form of statistical returns, these are seen best in the close working relationship with clinic staff both from day to day contact and more formally in case conferences which are held at all the peripheral clinics and which are attended by the various teams. These contacts provide an excellent opportunity for interchange of knowledge between all parties and create a learning situation for all concerned; they also enable us as a group to consider such fascinating and important problems as the early roots of maladjustment in the pre-school years. In this situation the health visitors' understanding of the problems of early emotional development is all-important, if we are to learn to deal with maladjustments at a time nearer to their causation or to give such advice or help as will avoid unnecessary emotional traumata in early life.

Other advantages of the peripheral clinics have become apparent in the course of the year; many of these were fundamental considerations in the development of the service. Very many patients are now able to attend the clinics, who for financial reasons or because of commitments to the younger children in the family, would not have been able to come regularly to a distant central clinic.

A closer link has been forged between the team members and the schools, members of whose staff visit the clinic from time to time, and with those general practitioners who have close contact with the health clinic, in addition to which psychiatric social workers are on the spot to take part in the antenatal services.

On the other hand, this interim phase has imposed a considerable strain on the professional staff, in the shape of travelling, lack of on-the-spot filing or clerical services and makeshift accommodation, but it is hoped that in two more of the peripheral clinics there will be an improvement with the completion of alterations at Broadfield Road Clinic and the purpose-built extension at Hartcliffe; this latter will be of especial interest as it is the first purpose-built unit available to the service. I think that the steady progress maintained throughout the year is a great tribute to the excellence of the personnel.

Having worked for over a year at one of the peripheral clinics I would like to indicate some of the "new" situations to which one is trying to adapt. Broadly, they fall into four categories:

- (i) Inter-Clinic-staff relationships
- (ii) Altered arrangements with the Administration
- (iii) Inter-disciplinary relationships
- (iv) Changed pattern of client-doctor relationships.

Previously the Child Guidance staff numbered some 11 professional persons, plus 3 clerks. They were based on one building which was not shared with any other Health or Education personnel. In this building each had his own room and they met formally or informally most days. Documents, if borrowed from the office, were usually returned the same day and it was easy for clerks to keep check on letters, attendances, records and statistics. The professional staff, now numbering 18, work as much in their peripheral areas as centrally. Inevitably, conflicting loyalties develop. Some are more attached to the service, others to the peripheral teams. Each team as it "works in depth" gradually becomes closer knit and the requests of the centrally based staff are felt as demands. Each team tends to evolve its own standards of note-taking and record-keeping which may or may not agree with previous practice.

Clarity of communication between teams and departments is essential. In any multi-disciplinary organisation it is of special importance when it bridges administrative gaps such as are found, say, between Health and Education. Teams may not agree as to whether all teachers and all doctors should have reports, no matter whether it was the doctor or the teacher who referred. Other departments, for instance the Children's Department or the Juvenile Court, used to having reports set out in one fashion, are disconcerted if the facts are

presented in different ways by different teams. Doctors, and also psychologists, tend to be individualists and do not like to have their professional views queried by "higher authority". When, however, their judgments are as much in the social as in the Health or Education fields, and when sending a child to a boarding school may cost the community £450 a year, it is barely surprising if they are asked to state a case in terms which the layman, who usually holds the purse-strings, can understand.

Form-filling is seen as a waste of precious time which should be more properly devoted to people. Possibly one of the big problems both in medicine and in the larger community services, is the need for "co-ordinators" who can bring together and arrange priorities between different specialists or teams. In our case, where previously, owing to the close-knit staff based on one building and with a shared office staff, this could be done informally, now it tends to require official administrative procedures.

The peripheral clinics can be a rejuvenating experience for the specialist too long used to the hospital psychiatric set-up and possibly spoiled by the material comforts of a clinic solely devoted to one specialty. One is back again in a multi-disciplinary set-up and one is at once aware of how different and intangible the modern psychiatric approach seems to doctors and nurses trained on the older and more "organic" lines. Although there is an increasing number of health visitors and doctors who are receiving more adequate teaching in psychological medicine, one still realises how much medicine is diagnosis-centred rather than patient-centred. One diagnoses a condition and only incidentally helps the client while the modern mental health approach is more concerned with helping the patient to resist and overcome his diseases and stresses. One still feels that to many medical personnel the emotions are unreal and that the only thing they think they can do with a "functional" condition is to assure the patient that he will grow out of it. In the peripheral clinic there are opportunities to meet general practitioners, opportunities which tend to be lacking in hospitals and the bigger central clinics, and one becomes aware of the price that is usually paid for specialisation with its greater technical efficiency. The gaps between teachers and doctors, between health doctors and family practitioners, are seen as real handicaps and causes of stress and strain, when in fact the aim of each discipline is the welfare of the individual.

The pattern of working in a mental health set-up which is client-orientated is difficult to superimpose on many health set-ups which are possibly service-orientated. Too tight a time-table or moving personnel from clinic to clinic, though possibly important for administrative reasons, loads the dice against personal relationships. While official case conferences are of use, it is the individual contact over cups of tea that probably is really the more educative, but one soon appreciates the difficulties of arranging a "fluid schedule"—something that is almost essential if one is going to work with dependent people. Possibly the health problem of this quarter-century is how to enable dependent immature people to grow into stable reliable parents. Medicine has learned how to deal with vitamin deficiency; can a Health Service remedy equally successfully parental deficiency?

Treatment interviews in the peripheral clinics enable one to see more clearly the family in their local surroundings. Visiting a central clinic or a hospital is an event. They dress accordingly, ask neighbours to look after the other children. Going "round to the clinic" is different; mother may bring several other children with her, and one can see how she looks after them. One can watch the referred child and his younger brother or sister play together or possibly struggle together. Although by no means the same thing as seeing the family in their own home, the gap is narrowed, and it is correspondingly easier to assess the inter-personal strains and stresses.

## CHILDREN'S CHEST CLINIC

W. H. Sutcliffe

Dr. Sheerboom was responsible for the work of the clinic until September, 1960.

The work of the clinic is summarized below:—

<i>New Patients</i>	<i>Old Patients</i>	<i>Total Patients</i>
17	28	45
Total attendances	144	
Sex ratio M : F	(3 : 2)	
N.P. Age Under 5	3 patients	
Over 5	14 patients	
Discharges	..	26
E.N.T. Consultant	..	9
Child Guidance Clinic	..	2
Periton Mead	..	5

Cases in general have fallen into one of three groups:

First, asthma and its related syndromes of eczema, hay fever etc. In these cases it has been unusual for psychological factors to be absent.

Second, recurrent upper respiratory tract infection followed by lower respiratory tract involvement accompanied or unaccompanied by spasm. This is a distinct problem in infant school children and is probably the main cause of school absence at this time. Such cases have not always shown abnormality in the upper respiratory tract, but certainly several have had chronically infected tonsils etc., from which infected material has been aspirated into the lower respiratory tract. The role of influenza and other respiratory viruses is difficult to assess.

It is hoped that the preventive aspect of the work of the clinic might be expanded in the near future since influenza and anticitarrhal vaccines are increasingly available.

Lastly, there are a group of children in whom the history would be in keeping with bronchiectasis and a decision has to be made concerning the value of bronchography. Consultation with the chest physicians has been most valuable on this point.

## CHIROPODY CLINIC

L. I. W. Tasker

The number of children attending the clinic for foot treatment during 1960 was a little higher than in 1959, there being 774 school patients as compared with 629 in the previous year. The number of treatments given to children of school age was 3,384 compared with 2,827 in 1959.

There were 578 new cases of *Verrucae Plantaris* (2,210 treatments) as compared with 436 (1,856) in 1959.

Other categories of defect remained very much the same as in other years and some 30 children were referred to the Orthopaedic Department for further advice or physiotherapy.

### Attendances

	<i>Primary and Secondary</i>		<i>M. &amp; C. W.</i>	
	<i>1st</i>	<i>Other</i>	<i>1st</i>	<i>Other</i>
Metatarsalgia	..	3	11	—
Hammer toes	..	27	54	—
Verrucae plantaris	..	578	2,210	—
Hallux valgus	..	14	28	—
Foot strain	..	10	24	—
Miscellaneous	..	142	283	4 3
	<hr/>	<hr/>	<hr/>	<hr/>
	774	2,610	4	3
	<hr/>	<hr/>	<hr/>	<hr/>

## DEATHS OF SCHOOL CHILDREN

A.L.S.

The number of deaths among Bristol children of school age during 1960 was 21 (11 boys and 10 girls). This is the lowest number recorded in Bristol and compares with 24 in 1959, and 23 in 1958. There were 3 cases of death from leukaemia during the year, compared with 5 in 1959. There was 1 other death because of a malignant growth. There were only 2 deaths from road accidents this year, and only one of these actually occurred in the City. This reflects great credit on teachers and others who are concerned with road safety and precautions against accidents. There was one other death due to accidental causes, that of a boy who was drowned whilst on holiday.

## DENTAL CLINICS

J. McCaig

The year 1960 was one of struggle for the School Dental Service in Bristol. The dental department at Brooklea Clinic remained closed because of staff shortage and Portway dental clinic had to close in October because of the untimely death of Mr. Chaplin on the 5th October 1960. At the end of the year the staffing position was equivalent to 9·3 full-time officers made up in the following way:—

Full-time Dental Officers	=	6·3
(including the P.S.D.O.)		
Part-time Dental Surgeons	=	3·00
Sessions equal to full-time officers		

Late in the year, the dental department of the Amelia Nutt Clinic was opened, on a part-time basis, when a sessional Dental Officer was appointed.

The staffing difficulties encountered in the year produced a decrease in school inspections and attendances made by children for treatment. The number of pupils inspected by the Dental Officers of the Authority were:—

(a) At periodic inspections:	42,081
(b) As specials:	4,370

giving a total of 46,451 compared with 51,431 last year.

The number of children found to require treatment was 29,053, the number treated 14,955, giving a percentage of 50%. This is a very good treatment rate, compared with an overall picture of the rest of the country. The number of attendances for treatment was 37,499, while last year 46,083 attendances were made. The school inspections reveal that many children obtain treatment in the dental practitioner service.

There is little room for complacency and as the caries rate is increasing, the combined efforts of both services are required to maintain a balance, but no child in Bristol need go for long without treatment. This does not solve the School Dental Service problems, two of which are:—

(1) Continued staff shortages. (2) Increase in caries.

(1) The continual loss of full-time officers is a serious matter. In Bristol two full-time officers will retire in about five years. At the moment there is no sign of permanent replacements by young dentists. We are grateful the local Dental Committee give us every assistance in employing sessional officers. These offset to a certain extent the lack of full-time officers, but, in five years time the loss of full-time officers might not be regained by the employment of sessionals. The great need is to try and get young dentists to take up the School Dental Service as a career. This calls for new thinking in how to attract them. Our progressive policy in Bristol of renewing old equipment and making our surgeries more colourful is one of the methods.

The Chief Medical Officer to the Ministry of Education in his 1958-59 report, "The Health of the School Child", stated that salaries offered in the School Service are out of character with the remuneration in the National Health Service. This is one of the reasons why recruitment to the School Service is about at a standstill. The recent increase in salary of 12½ per cent granted to School Dental Officers may have some effect, and the termination of National Service this year may encourage some young Dental Surgeons to enter the Local Authority dental services. The report also puts forward other suggestions, such as recognition of the status of the Principal School Dental Officer and the need for more responsible posts in the School Dental Service.

But is money the only yardstick? Take-over bids, more profits, higher salaries are universally accepted as our outspoken standards of success. If any service is understaffed it seems to be accepted that the automatic cure is more money in the pocket. Real stature is personal and is attained by those whose achievements are not measured solely by income. However much we are impressed by outward material possessions, we still respect the nurse, the teacher, the school dentist, and so on, who chooses his role as a vocation and because he can tolerate no other.

(2) A new era of rapid deterioration has set in, and with the rising prevalence of dental disease and a profession small in numbers, it is true to say that "never in the field of human 'misery' has so much been required from so few".

Numerous suggestions are offered and methods advised. While awaiting the enlightenment of public authorities to sanction the supplementary fluoridation of deficient water supplies, possible approaches to improving the teeth of children should be considered.

(a) It is necessary to expand the treatment services and educate the public in the use of them.

(b) Improve oral hygiene and feeding habits.

(c) Promote dental health.

(a) Much has been said on how to expand the treatment services, and we must wait and see if the new salary increases have any effect.

(b) In improving oral hygiene and feeding habits in children, the battle of the tuck shops has been waging all year. In my last annual report, I advised retaining the tuck shops in the hope that they might be persuaded to sell products less harmful to the teeth, such as nuts and raisins, potato crisps, etc. Some authorities have tried to ban the school tuck shop altogether, but this seems unreasonable, as life would be dull without a bun or a sweet. The aim of introducing other foodstuffs into the tuck shops is a twin action technique because it is found that the increased consumption of sweets and cakes is turning children into Billy and Bessie Bunters, as well as increasing dental decay. School clinics originally set up to deal with cases of malnutrition are now handling cases of the over-fed child, some as many as five stones overweight. In Bristol, the Principal School Medical Officer, Dr. Wofinden, sent a circular to the Heads of all school departments on the subject of "The sale of biscuits and sweets in schools". Head teachers were advised to sell less harmful products such as apples, etc.

Miss Adams, Head Mistress of Speedwell Girls' School, at a meeting with Dr. Wofinden, Dr. Smallwood, Miss Duncan and myself, agreed to the experiment of introducing apples into the school tuck shop. I am happy to report that the experiment is proving successful and Miss Adams assures me that the girls are co-operating. The problem of handling apples is not an easy one because of their bulk and difficulty in disposing of the cores, but Miss Adams considers it is not insurmountable and tackles it with her usual zeal and energy.

Miss Ram, Head Mistress of the Claremont School for Spastics, and other Head Teachers are also taking part in this campaign to save the children's teeth. Here then we have teachers who do not ignore the teaching of others.

We are up against tremendous opposition from the confectionery trade because the sweet tooth has its profits. The amount spent per annum on chocolate and other sweets is £260 million while £140 million is spent on sugar, jam and jelly. To confirm our reputation as the world's most avid eaters of sugar, each man, woman and child, will consume this year 26 lb. of sweets (about £4 worth) and 60 lb. of sugar (excluding jam or jelly) (about £2 worth). It is no wonder that £5 million can be spent by the sweet industry in advertising in the Press, or on television. To combat this, £5,000 is donated for dental health, a very small crumb indeed.

(c) In promoting dental health, it is very difficult to persuade children to comply with the simple measures advocated. It is now considered that dental caries is very largely preventable for some people, and amenable to control in others. The nature of the disease is such, that its onset is early in childhood, and preventive measures should be applied to young children. Failure to do this will result in costly and time-consuming treatment. Thus, dental health education is important, but to be successful with children, one must aim at sincerity. In finding out why children do this or that, the purpose should be to find out the true reason.

Slogans and gimmicks are all very well, but when the slogan, "Clean teeth do not Decay" failed, and pamphlets stating that "animals' teeth do not decay" had little effect, it was not difficult to reason why; of course clean teeth decay, and children will soon tell you that their pet dog has bad teeth. In advocating tooth-brushing, pastes, rinsing, etc., one must be sure to emphasize that these measures are beneficial but not a certain preventive. The education of the whole community in the value of children's dentistry is essential, if the children are to benefit from up-to-date knowledge, new techniques and advances in control and prevention of dental disease. Only in this way can parents, and those in authority over children, be persuaded to take part in the programmes for the betterment of dental health.

### Dental Hygienist

The work of the dental hygienist continued during the year and 1,039 children were seen and treated. Scalings and gum treatment were carried out and instruction given in oral hygiene.

When the children are receiving treatment by the hygienist, the opportunity is taken to teach them adequately the elementary procedures of tooth brushing and rinsing. They are encouraged to reduce their intake of sweets and chocolates and told that eating a few immediately after meals is less harmful than eating them between meals. Thus they are brought round to the idea that measures exist to reduce decay in their teeth and that this is within the scope of their own behaviour and effort and if pursued with some diligence can have beneficial results.

One dental hygienist to 65,000 children is only a drop in the ocean and it may be of interest to compare this with New York where there are 150 hygienists, one to every 6,000 children approximately. In New York the hygienists carry out prophylactic treatment and, not content with seeing the children, they interview some of the parents as well. One interesting point may be worthy of attention; during their working year they concentrate their treatment on children who do not have dental care that year.

In Bristol the dental hygienist also visits the schools giving instructive talks showing dental health education films and these are much appreciated by all.

The figures relating to the work of the dental hygienist are:—

Number of children seen .. .. ..	1,039
Number of attendances for treatment .. .. ..	1,344
Number of mothers seen .. .. ..	116
Number of attendances for treatment .. .. ..	183

## Maternity and Child Health Service

The school dental officers and the dental hygienist carry out work for expectant and nursing mothers and pre-school children.

During the year there were 318 sessions devoted to mothers and young children. Most of the work done for mothers is conservative treatment, but for the pre-school children, extractions still outnumber by a long way the amount of fillings done.

## Hospital Facilities

The Dental Hospital in Bristol is responsible for some of the Local Authority's schools and the children attending these schools are given a dental inspection by a dental surgeon from the Department of Children's Dentistry at the Hospital and treatment is subsequently carried out at the Hospital.

The work carried out during 1960 is shown below:—

Number of children inspected .. .. ..	926
Number of children found to require treatment .. ..	662
Number of children treated .. .. ..	233
Attendances .. .. .. .. ..	1,475

Mr. Hazell, who is Senior Hospital Dental Officer to the Regional Hospital Board, continues to give us three sessions a week at Southmead Clinic. In addition he admits patients to hospital who are sent by our dental officers where it is considered that their dental treatment should be carried out under hospital conditions, e.g. patients suffering from extreme nervous conditions, or where it is known that patients have excessive haemorrhage following tooth extraction.

## Dental Technician

Output of the laboratory is shown below:—

No. of dentures for mothers ..	171
No. of dentures for children ..	89
No. of repairs for mothers ..	18
No. of repairs for children ..	8
No. of inlays .. .. ..	5
No. of crowns .. .. ..	2

## Orthodontic Clinic

The Committee approved for implementation during the year 1961/62 a scheme of expansion of the orthodontic service, including alterations to the laboratory, and an outlay of equipment to cost £1,000.

This will enable our dental officers to carry out simple orthodontic procedures at their own clinics and save some children travelling to the Dental Hospital from outlying districts. This scheme will come into effect in April, 1961, and with this in view a change of policy on the part of the Consultant Orthodontist is being tried out on an experimental basis. Previously Mr. Nicol,

who is the Consultant Orthodontist at the Dental Hospital, visited Central Clinic one session per week; now he visits each clinic in turn. Bringing a consultant service to the outlying clinics enhances the prestige of the dental officer and the clinic. It is more convenient for the patients and it is hoped that this change of policy will be successful. During this experimental phase, impression sessions were stopped as it was found that many patients lost interest, having attended twice at Central Clinic, one visit for impressions, and one visit for consultation, before being referred to the Dental Hospital. Hence the drop in the number of attendances. Cases will still be referred to the Dental Hospital for teaching purposes, but more cases will be referred back to the clinics for treatment by simple appliances, instead of just extractions.

Details of the work during the year are as follows:—

No. of new patients .. .	.. .	382
No. of attendances for consultation .. .	.. .	613
No. of attendances for impressions .. .	.. .	129
No. referred to the Dental Hospital .. .	.. .	292
No. of treatments completed .. .	.. .	33

### Extension Dental Services

Children from residential schools, nursery schools, handicapped children and those in Homes run by the Authority are given dental inspection by the Authority's dental officers.

Mr. Swallow, Lecturer in Children's Dentistry, King's College Hospital, London, visited Claremont School for Spastic Children and carried out a survey. At the moment of writing the result of this survey is not known. I attended a meeting of Public Health Dental Officers at Central Clinic following his visit to this school, and asked his advice about dental treatment for the children attending Claremont School. He agreed with me, that ideally, treatment should be carried out in Hospital. The three sessions Mr. Hazell gives the Authority at Southmead Clinic could be utilised in this way as severe cases could be dealt with in Southmead Hospital which is in close proximity to the Clinic.

This is put forward as a possible solution to this most difficult problem.

### EAR, NOSE AND THROAT SERVICE

H. D. Fairman

The Ear, Nose and Throat Service in Bristol has two main functions; firstly, to examine and treat those children referred to the clinic by School Medical Officers, and secondly, to seek out deaf children, assess them and tender advice in regard to their education.

The examination of children referred to the Ear, Nose and Throat Clinics has proceeded as in former years. The service has been expanded by the addition of one clinic session a week under the care of Mr. K. Roddie, F.R.C.S. whom we are pleased to welcome to the staff. One of the E.N.T. Clinics is now held at the Amelia Nutt Clinic, Withywood, and this is a great amenity to the parents and children of the populous post-war estates of Withywood and Hartcliffe. Children are referred chiefly because of recurrent or chronic infections of the upper respiratory tract or middle ear.

The number of patients seen at the Ear, Nose and Throat Clinics during the year was 1,041. These were mostly cases of tonsils and adenoids, and where appropriate these children were passed on to the hospitals for operative treatment. There were 75 cases of otorrhoea which had been referred to the consultant clinic by the School Medical Officers because of failure to respond adequately to treatment in the local clinics. There were only 5 of these cases still under treatment at the end of the year.

The search for deaf children, their assessment and placement, is a function of the Hearing Assessment Service which has been developed over the past 5-6 years and is assuming an increasing importance and is engaging an ever growing proportion of our effort. Since the addition of the services of Mr. Roddie, who has relieved the pressure of work in the E.N.T. Clinics, more time has been made available for the service to deaf children. This work falls into three parts. Firstly, the screening of babies at risk, i.e. children of deaf parents, premature infants, "rhesus" infants, etc., and ideally of all babies in the 3-6 months age group. Infants who fail the screening tests for deafness are then referred to one of the E.N.T. Clinics or directly to the Hearing Assessment Clinic. The screening of infants under risk is well organised, but the screening of all babies is still not done and owing to the lack of this service in the past, some deaf children are not recognised until they attain school age and are then picked out by the school medical officers and sometimes by the school teacher. The screening of all infants requires that all health visitors be trained to administer the screening test. Happily a beginning is to be made in June, 1961, to train health visitors to apply the screening tests. Secondly, those infants who fail the screening tests are referred for diagnosis to the Hearing Assessment Clinic. Here they are examined by a team consisting basically of a Consultant Otologist, a Medical Officer, a Teacher of the Deaf, and an Educational Psychologist; other interested persons or those with special knowledge also attend. The diagnosis at the Hearing Assessment Clinic may be made at one visit. Usually two visits are necessary and in not a few instances many visits are required. Even after the child has been conditioned for testing by the teacher of the deaf over many visits, the team may still be in doubt over the diagnosis and may even be in doubt in some cases as to whether deafness is present at all. If the child is found to be deaf then the third or educational aspect of the service to deaf children is considered. The pre-school child usually attends the Teacher of the Deaf of the Assessment Clinic for auditory training. For the school age child, the Assessment Clinic team comes to a decision and makes a recommendation to the Education Authority for placement. This recommendation may be for attendance at a normal school, the child to wear a hearing aid and have help from visits by a peripatetic teacher of the deaf—attendance at a unit for partially deaf children, attached to a school of the appropriate standard—attendance at the Authority's Elmfield School for the Deaf, or attendance at a school for children with multiple disabilities.

The medical and the educational functions of this service overlap and one may be frustrated by the actions of the other to the detriment of the child. To mis-diagnose a case of deafness would lead to a wrong placement for a child but equally non-availability of the type of educational facility recommended by the Assessment Team could result in wrong placement. For instance a partially deaf child could be placed either at Elmfield or at a normal school; at Elmfield it would lack the stimulus of a hearing environment; at the normal school it might be unable to cope with the situation. Throughout the year we have been hampered by lack of staff, i.e. lack of Teachers of the Deaf. Whether there be a national shortage of Teachers of the Deaf or not, there is no doubt that as far as Bristol is concerned there is a shortage and until it is overcome we will be unable to offer what we consider to be adequate educational facilities to all types of deaf children. At the present time we have no Teacher of the Deaf for the Assessment Clinic and no teacher for the proposed Infants' Partially Deaf Unit.

Hope for the future lies in the fact that one of Bristol's teachers is now undergoing training as a Teacher for the Deaf and next year another teacher goes for training. It is to be hoped that further candidates will consider taking

up this absorbing, satisfying, and, in the best sense of the word, charitable branch of the teaching profession and that the Education Authority will support any candidates who may come forward. Without teachers the service fails, in fact it scarcely begins.

## **EMPLOYMENT OF CHILDREN**

L. A. Tavener

During the year ended 31st December, 1960, appointments for medical examinations were made for 723 children. Of this number three children were found to be unfit to take part-time employment and therefore, registration was refused. The remaining 720 children were registered for part-time employment as shown below.

There was an increase of 49 children registered for employment over the 1959 figure of 671. The average number of children employed at any time was about 500.

Three children were examined and found fit to take part in public entertainments for which licences were granted. No adverse reports were received respecting the conditions under which such children were employed.

<i>Trades</i>	<i>Children Registered</i>		
	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Newsagents	607	51	658
Butchers	1		1
Grocers	20	6	26
Multiple Stores		8	8
Others	7	20	27
<b>Total</b>	<b>635</b>	<b>85</b>	<b>720</b>

No child was found to be unfit for further employment when re-examined on change of employer or occupation.

## **ENURESIS CLINIC**

J. E. Kaye

During last year 160 children were treated at my sessions at the Enuresis Clinic, held at the Central Clinic. Of these, 25 children were discharged as cured after not less than six months' observation; 43 failed to keep appointments and were discharged (16 of them attended only not more than three times and 8 were probably dry but failed to attend for a final check-up) and 92 children remain under treatment.

The treatment of nocturnal enuresis followed the usual pattern of previous years, but it was possible to use the nocturnal enuresis electric alarm on a larger scale. This is a device which wakes the child at the beginning of micturition and this eventually should establish a conditioned reflex and the child should wake up before wetting himself.

Altogether, 28 patients were treated with the alarm. Of these 17 were cured, 4 were discharged and 13 remain under observation; 3 showed marked improvement but still were occasionally wet.

The remaining eight cases can be divided into the following groups; 3 refused to co-operate, one of them a boy of 15 years of age and two younger boys. These children had other emotional problems and were "not ready" for treatment of enuresis.

Five patients showed no improvement at all, one of them was a boy of 16½ and another of 15 years of age. A boy of 11 years of age slept so soundly that he did not hear the alarm bell. All these children had full urological

examination and showed no pathological changes. From our limited experience it appears that the best response to this mechanical treatment was with children 7 to 12 years of age and who had no serious emotional problems. Children under seven years seemed to be too young to co-operate and some of them were disturbed or even frightened by the loud bell. The older children over 12 years of age responded more slowly than the younger group and some of them did not respond at all. This is, however, only the impression from the results we had with our limited number of cases.

The treatment with the enuresis alarm lasts on average three months. Children who respond to the alarm become dry within two or three weeks or even sooner, but they sleep on it for another eight to ten weeks to make sure that the reflex is established and to give time for the patient to develop self-confidence and convince himself that he has full control of the bladder. In two cases when the treatment was discontinued too soon by anxious mothers, children reverted to enuresis and it was necessary to start treatment from the beginning.

It was also shown that some children wet themselves several times a night. In some cases the alarm went off four times a night, but as the patient improved the bell rang less frequently—once a night, once in two or three nights, and eventually the child became dry.

The results so far are very encouraging and we hope that next year it will be possible to produce a more comprehensive report on this method.

W. M. Sutcliffe

The accompanying table shows the number of patients attending my sessions at the Enuretic Clinic during 1960.

*Cases first seen in 1959*

(1)	Discharged during 1960 ..	19
(2)	Still under treatment at 31st December, 1960 and carried forward to 1961 .. ..	10      29

*Cases first seen in 1960*

(1)	Discharged during 1960 ..	32
(2)	Still under treatment at 31st December 1960 .. ..	36      68
<hr/>		
<hr/>		
97		

Of the 51 cases discharged during the year 19 were dry at night, 23 failed to attend for various reasons (mainly due to non-co-operation on the part of the mother) 8 were referred to the child guidance clinic whilst one was discharged still wet. (This is an E.S.N. child who failed to respond to any form of treatment.)

It is interesting to note that 7 cases were still under supervision after first attending in 1959. These were all cases with a tendency to relapse if supervision was relaxed.

The usual simple psychological methods were used (reward for dry nights etc.). A few patients were treated with the bell blanket device but experience with this method was so limited that it is not possible to comment on its efficacy at present.

A small number of children have definitely been helped by the exhibition of a tranquilliser during the day.

**EYE CLINICS**

P. Jardine

The work of the Refraction Clinics was continued during 1960 in much the same way as in previous years. The total number of children who were examined for errors of refraction was 4,371 including 1,142 new patients, and the total attendances made by children at the Ophthalmic Clinics during the year was 6,349. Surgical treatment of squint is arranged at the Bristol Eye Hospital and 88 operations were carried out for this condition during the year on Bristol school children. The preliminary investigations in these cases are made at the Bristol Eye Hospital or at the Central Health Clinic and a period of orthoptic treatment may precede or follow the operation.

The Orthoptist, Miss M. J. Smith, has continued in charge of the Orthoptic Department at the Central Health Clinic. She divides her time between the Clinic and the Bristol Eye Hospital where an orthoptic service is also provided for children including numbers of Bristol school children.

The figures relating to the orthoptic work at the Central Health Clinic during the year are as follows:—

Number of sessions	..	..	..	..	366
Number of new cases seen	..	..	..	..	453
Other attendances	..	..	..	..	1,969
Total attendances	..	..	..	..	2,422

**HANDICAPPED CHILDREN AND SPECIAL SCHOOLS****Blind Children**

A.L.S.

There was again a slight fall in the numbers of blind children maintained by the Authority at the Bristol Royal School and Workshops for the Blind, Westbury-on-Trym. There were 12 children (9 boys and 3 girls) there at the end of the year, as compared with 16 (10 boys and 6 girls) at the end of 1959. Two of the girls were attending as day pupils, the remaining girl and the boys being boarders. In addition to these children there were 4 children (1 boy and 3 girls) being maintained at the Royal Normal College for the Blind, and 1 boy at the Worcester College for the Blind. There was 1 girl only at Condover Hall School for Blind E.S.N. Pupils. This makes a total of 18 blind children of school age for whom provision was being made by the Authority at the end of the year.

In addition there were 4 young persons receiving training at the Royal School and Workshops for the Blind under further education arrangements. 1 young man was attending as a boarder, and the other 3 as day pupils; 3 others were also receiving training under further education arrangements, 1 at the Hethersett Pilot Training Centre, Reigate, 1 at Wallingford Farm Training School, Oxfordshire, and 1 young woman at the Royal Normal College for the Blind, Shrewsbury.

**Partially Sighted Children**

There were 21 children on the registers of the partially sighted unit at South Bristol Open Air School at the end of the year (16 boys and 5 girls) as compared with 19 (14 boys and 5 girls) at the end of 1959. The preponderance of boys continues to be a feature of these classes, and indeed it is even more marked than in the previous year. The children are of course kept under constant ophthalmic review, either through the Authority's own ophthalmic service or at the Bristol Eye Hospital.

In addition to the children attending the partially sighted unit at South Bristol Open Air School there were 5 children attending residential schools at the end of the year as follows:—

		<i>Boys</i>	<i>Girls</i>	<i>Total</i>
West of England School for Partially Sighted Children, Exeter		1	2	3
Exhall Grange School, Coventry	.. .. .. ..	2	—	2
		—	—	—
		3	2	5
		—	—	—

## Deaf Children

R. E. Olding

### *Elmfield School for Deaf Children*

During the past year children and staff gained increasing experience of the use of the auditory equipment. A voice-level meter was incorporated in the auditory system in each class room. The meter is a valuable aid to both teacher and child, particularly during voice production exercises. Generally, all the equipment works extremely well, but the loop system is limited by the performance of the present N.H.S. transistor aids, which we can only hope will eventually be replaced by models approaching the best now offered commercially.

Subject teaching was introduced into the Upper School and will be extended. Valuable use of the B.B.C. Television Educational Broadcasts was made. A Company of Girl Guides and a senior section of Boy Scouts were formed. Useful visits and journeys were made during the year to other Bristol schools, to Towyn, to London Airport, and to camp, near Minehead. Two girls were awarded Bronze Medallions and two others Intermediate Certificates by the Royal Life Saving Association.

The usual close liaison with the Assessment of Hearing Clinic at the Central Health Clinic, the Hearing Aid Clinic at the Bristol General Hospital, the Partially Deaf Unit at Eastville Junior School, and the Peripatetic Teacher of the Deaf, was maintained.

At the end of the year 57 children were in attendance at "Elmfield":—

		<i>Boys</i>	<i>Girls</i>
Bristol L.E.A.	.. ..	23	21
Gloucestershire L.E.A.	..	7	5
Bath L.E.A.	..	1	—
		—	—
		31	26
		—	—

In addition to the children at Elmfield the following deaf children were being maintained at various residential schools at the end of the year:—

		<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Mary Hare Grammar School, Newbury	.. .. ..	2	2	4
Royal West of England School for the Deaf, Exeter	.. ..	—	1	1
Yorkshire School for the Deaf, Doncaster	.. ..	—	1	1
St. John's School for the Deaf, Boston Spa, Yorks.	.. ..	2	—	2

K. Smith  
*Unit for Partially Deaf Children Eastville, J. M. School* R. G. Lewis

During the past year the range in ability, age and deafness of the children in the Partially Deaf Unit has increased. Owing to staffing difficulties the five children who have reached secondary school age have remained at Eastville because they are not ready for full integration within secondary schools. In spite of this, it was agreed that two new children should be admitted; these are six years of age, and one has considerable hearing but is emotionally disturbed.

During the year one girl has taken the entrance examination for the Mary Hare Grammar School for the Deaf.

The integration of the children into normal hearing society remains the main aim of the unit and all the children spend a proportion of time with hearing classes. Two boys and a girl join the top class for English, six go to other classes for arithmetic, all for P.E., games, handwork and needlework, and six for music while the other six have music with a music teacher. The teacher of the deaf works closely with the other teachers to give extra help to the children with these subjects.

The Westrex Auditory Training Unit and loop have proved most beneficial while an extra amplification stage has improved the Phillip's Group Aid considerably. Eleven children have Medresco hearing aids of the transistor type, while one boy, who is very deaf but still benefits educationally in the unit, has a Multitone aid.

Close contact is maintained with the parents and with all other workers for the deaf in the City.

In addition to the children at Eastville School, the following partially deaf children were being maintained by the Authority at residential schools at the end of the year:—

		<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Tewin Water Residential School for partially deaf children, Herts.	.. .. .. .. .. ..	2	—	2
Ovingdean Hall Residential School, Brighton	.. ..	2	—	2
Burwood Park School, Walton-on-Thames	.. ..	2	—	2

*Partially Deaf Children Visited by the  
Peripatetic Teacher of the Deaf*

R. H. Sturman

The hope to establish a Partially Deaf Unit in an Infants' School mentioned in last year's report has not been realised because there was no response to advertisements for a Teacher of the Deaf to do this work. Children who would have been placed in this Unit have remained under the care of the Peripatetic Teacher or been placed in the Junior Unit.

A new Westrex portable individual auditory training amplifier which was added to the equipment has proved most helpful.

The year commenced with twenty-six children on the register, twenty-four carried forward from 1959 and two new ones. Two boys and one girl left school at Easter and started work in April and are happy in their jobs. During the Summer term two girls and three boys were added to the list. At the end of the school year in July two children left to commence work and four needed no further help.

In September one boy from a nursery school was transferred to the School for the Deaf, two boys from Primary schools to the Partially Deaf Unit at Eastville School, and one new girl was added to the list. Two boys moved up from Infant to Junior classes and one new boy was added in December.

Most of the children have made good or satisfactory progress. One junior girl who maintained her position at the top of her class hopes to obtain a grammar school place next year. One boy wrote the most interesting of forty essays from his class. Another boy in a comprehensive school moved up to sixth place in his class of thirty-five.

The infants and lower juniors through lack of staff to start an Infant P.D. Unit have not been able to have as much individual attention as they really need. This should be remedied in the coming year.

Altogether 795 visits were made during the year and at the end of December the children receiving help were placed as indicated below:—

School		Boys	Girls	Total
Comprehensive & Secondary		5	3	8
Primary .. ..		7	3	10
Open Air School .. ..			1	1
Special Schools .. ..		1	1	2
Totals: ..		13	8	21

#### *Provision for Partially Deaf Children of Nursery School Age*

A.L.S.

In the Report for 1959 a proposal was mentioned to establish a class for partially deaf children of nursery school age at Ashton Vale Primary School. Unfortunately it was not found possible to open this class in 1960 as had been hoped because it was impossible to appoint a suitable teacher of the deaf. The classroom has now been fully equipped, however, and it is hoped to make an appointment and to commence this class early in 1961.

#### *Hearing Assessment Clinic*

H. M. Gibb

During 1960 the work of the Hearing Assessment Clinic was curtailed by the difficulty of obtaining adequate clinical time for auditory training of the young deaf child. Mrs. Joan Stephens, the Teacher of the Deaf, resigned in July and her post has not been filled. Auditory training therefore came to a standstill.

It had been hoped that the Infant Unit for Partially Deaf Children at Ashton Vale would be opened in September 1960 and would meet the needs of partially deaf children of the 2—7 age group. This was not possible because no Teacher of the Deaf could be obtained for the work. Consequently, the children who required placement there have of necessity either remained at home or been placed in nursery classes or schools or day nurseries, or, in the case of the children of school age, in primary schools.

It is recognised that these placements are on the ground of expediency and not really suitable for these severely handicapped, partially deaf children who have too much hearing to be placed at Elmfield School for the Deaf, and require a different educational approach from the severely deaf child. This has retarded the progress of these children and caused a good deal of anxiety to the parents and also to the teachers of the primary schools, who have had to accept children with severe partial deafness in large classes in Infant Schools. They have felt unable to give them teaching suitable to their need.

The work of the Hearing Assessment Team has therefore been mainly concerned with the diagnosis and recommendations for educational placement. Besides the severely deaf and partially deaf children seen, many cases are referred to exclude deafness in children who have delayed development of speech or speech defect. These are referred for appropriate treatment. A number of children of the 4—5 year age group are seen with acquired conductive deafness due to upper respiratory infection. These cases are referred to routine E.N.T. Clinics and are followed up there.

Mr. Walter King, the Psychologist, resigned in February 1960. His work was done by Mr. R. V. Saunders, Senior Educational Psychologist until Dr. Klaus Wedell was appointed to join the team. Dr. Wedell now holds regular sessions at the Central Health Clinic for psychological assessment.

This is an essential part of the diagnosis of partially deaf children who become backward and emotionally disturbed, often presenting serious behaviour disorders. Dr. J. E. Kaye, Assistant Medical Officer, has joined the team.

Two sessions are held weekly by Dr. Helen Gibb and Dr. Kaye for screening observation and preparing of children for audiometry. The whole team meets for consultant sessions with Mr. H. D. Fairman once a month. The following is the number of children attending the Clinic.

Total attendances, 1960	..	..	..	371
No. of cases requiring auditory training	..	..	..	33
No. of cases referred to Elmfield School for Deaf	..	..	..	5
No. of cases referred to Eastville Partially Deaf Unit	..	..	..	3
Total No. of current cases	..	..	..	120

### Educationally Sub-normal Children

*Russell Town Day Special School for Senior Boys*

J. N. Tolley

We began 1960 with 115 boys on roll, twelve fewer than the previous term, and by mid-summer our numbers had fallen to 108—the lowest figure in twelve years. By the end of the year the roll had increased again to 115, including 2 extra-district children.

The year has seen two changes of staff and, in addition, one teacher seconded to a third-year training course.

The year 1960 will be particularly remembered because of the visit of the Chief Education Officer to present prizes at the end of the mid-summer term, and the visit of the Chairman of the Education Committee to do the same at Christmas. We have also had a welcome visit from Her Majesty's Inspector of Special Schools. During the Open Week in July, held under the Mental Health Year arrangements, a number of people came to see the school and expressed interest in our work.

During the year more positive steps have been taken to aid the transition of our boys from school to work, with the further development of "Probationary Employment" and an increasing tendency for boys to remain at school until work is found for them. These arrangements have been widely welcomed by boys, parents and employers.

*House-in-the-Garden Day Special School for E.S.N. Senior Girls* I. M. Bond

The year 1960 at House in the Garden was one of steady growth and expansion of work. For most of the year the school was full, but by Christmas the number of pupils on registers had dropped to 97.

Our aim is to equip the girls to be good women in homes, making them happy places. Also we prepare the girls to earn their living, helping them to come to terms with themselves and form natural, happy relationships with others. We try to inculcate good habits, and to broaden their interests and experiences.

The school is run on a family basis caring for the needs of individuals, but bearing in mind that we all need to be able to fit into society.

We have entertained many groups of visitors from many places. Our entrance hall is a source of great interest. It comes alive as a post office at Christmas time; a house; a section of a store showing materials and garments made from them; a cake shop at Easter with the meaning of Easter cookery suitably explained. Using these displays of different kinds, we are encouraging the girls to read and to gain a sound background of general knowledge which serves to increase their self-respect and confidence, so necessary for girls at this school.

Additional activities, furthering our main aims, are the continuance of our link with Lawrence Weston Old Age Pensioners Unit, establishment of a link with Gloucestershire Special School, Stokesbrook, an interchange of visits with other schools, a visit to Portishead, and visits to factories and showrooms and to a performance of the "Coppelia" ballet at the Hippodrome.

In July, as part of Mental Health Week in Bristol, our school was open to visitors every afternoon. All branches of the work were shown; a large group of parents attended and were especially delighted with the dress show, when girls modelled clothes they had made themselves.

*Henbury Manor Day Special School  
for Junior E.S.N. Children*

Jean Davis-Morgan

This year has brought further improvements to Henbury Manor School and in addition to the new Hall we now have a highly efficient heating system so that as well as providing spacious accommodation for their work and play the comfort of our children is ensured too.

Now that special classes in the primary schools have been organised the number of multiple handicapped pupils admitted has increased and many present social as well as educational problems.

The courses arranged for teachers of E.S.N. children have attracted some of the Staff and in consequence we have had more changes than are desirable. The number of teachers interested in our work is increasing and we have many visitors, both local and from overseas, as well as numerous parties of students.

A recent investigation has revealed the following figures which may be of interest.

*1946—1961*

650 children admitted	{	400 boys	=	62 per cent.
		250 girls	=	38 „ „

*per cent*

340 transferred to Sen. Day Sp. Schools ..	..	..	..	52.3
52      „      Residential Spec. Schools ..	..	..	..	8
18      „      Special Classes ..	..	..	..	2.7
120 excluded as ineducable ..	..	..	..	18.4
3 to Epileptic Colonies ..	..	..	..	.46
1 to Remand Home ..	..	..	..	.15
6 to St. Christopher's (Rudolf Steiner) ..	..	..	..	.92
2 returned to Primary Schools ..	..	..	..	.3
6 trans. to South Bristol Open Air ..	..	..	..	.92
4 withdrawn by parents in favour of Private Schools ..	..	..	..	.6
14 left Bristol ..	..	..	..	2.15
1 transferred Deaf School ..	..	..	..	.15
3 deceased ..	..	..	..	.46
80 still on registers ..	..	..	..	12.3

650 Total.

*Diagnostic Unit*

B. J. Boulton

During the year there was a steady demand for places in this section of the school. I now see most of these young children of doubtful educability before admission, and all of them immediately after admission. They often present many problems.

The child of  $5\frac{1}{2}$  years with an I.Q. in the upper fifties and a corresponding mental age of about  $3\frac{1}{4}$  years will behave and talk much as the normal child of  $3\frac{1}{4}$  years behaves and talks. By the time he is seven years old it can fairly safely be assumed that his mental age will be little more than four years (I.Q. 58). It is not surprising that he lacks attainments in reading and number because he

cannot be expected to have made a start in these subjects. After giving close attention to the views of those who are attempting to teach them, perhaps all we can say is that past experience has shown that children of the borderline developmental level at the age of seven years may, or may not make the grade in a Special School. No doctor whose knowledge of such a child is limited to a single Clinic examination can be expected to reach a firm conclusion in the matter.

On the other hand, a number of children admitted to the Diagnostic Unit have I.Q.'s in the lower fifties or upper forties, and from observation of their conduct and conversation it is often obvious well before they reach the age of seven years that they will be more suitable for Training Centre care.

During the year, after consultation between the headmistress, Miss Davis-Morgan, the educational psychologist, Mr. I. Hickish, and myself, a number of children from the Diagnostic Unit and two or three from the Junior School have been transferred to the Training Centre. It is clear from our records over the last ten years that the proportion of children admitted to the Diagnostic Unit who fail to make the grade in the Special School proper is so large that some may consider that the Diagnostic Unit of the future might be more conveniently placed as a special section of the Training Centre.

When the time comes for the transfer of children from the Special School to the Training Centre, we are already finding that parents are more ready to accept the situation when they know that within the terms of the new Mental Health Act, they have the right to request a review of their child's case in twelve months' time. The dropping of the term "ineducable" with its suggestion of finality has also helped.

#### *Junior Special School*

Very occasionally, near the end of his or her time in this section of the school, a child may show such a low level of ability as still to give rise to doubt about his or her future in the Special School. Under these circumstances we now recommend a twelve months trial in the Senior Special School to be followed by a review of the case at the end of the year.

Both in the Diagnostic Unit and in the Junior Special School, a number of children (about 30 per cent) are under Hospital treatment or observation for additional disabilities. Various degrees of epilepsy, mostly minor in type, form the largest group. Second on the list comes defects of hearing.

In such cases, the medical notes are kept up to date as far as possible both by the co-operation of the Bristol Royal Hospital for Sick Children and by the valuable information obtained for me by Sister Head following her visits to the homes of our children.

#### *Special classes for E.S.N. children in ordinary schools*

A.L.S.

The policy of providing for the less severely educationally sub-normal children in special classes in ordinary schools was extended during 1960, when several new classes were opened in both primary and secondary schools. There are now 17 special classes for educationally sub-normal children in primary schools and 9 in secondary schools. In addition a special class for children with problems of maladjustment was opened at Bankleaze Junior School. These special classes enable provision to be made for the special educational treatment of the less severely retarded children, and this policy is much more acceptable to parents than provision in special schools. The unit at Hillfields Park School which was commenced about two years ago to give practical training to teachers undertaking work with backward children has continued to function throughout the year, and the experiment has proved a great success.

## Residential Special Schools

*Croydon Hall Special School for Educationally Sub-normal Senior Girls' Felon's Oak, Minehead* M. H. Davies

There are at present 39 girls on the books of Croydon Hall School; 15 of these are from Bristol, eight from Wiltshire, five from Somerset, three from Dorset, two from Bath and one each from Coventry, Kent, Plymouth, Poole, Bucks, and Newport.

Of these girls nine are 15 years old, six are 14, 14 are 13, five are twelve and five are 11. The I.Q.'s of these girls range from 46 to 93.

Four girls are taking various drugs for epilepsy, two are sub-thyroid, and one is a spastic.

Twelve are under Care or Protection and of the remaining 27, 17 have shocking homes. One girl has lost an eye through rough treatment in her own home, one girl was assaulted by her father, a second by her stepfather, one girl saw her mother murdered by her father, one child is the result of incest; four girls have fathers serving prison sentences, three are unaware of ever having had parents, and in four cases there is parental insanity.

This shows the desperate need of a school like ours, and the imperative necessity of making such a school, as far as is humanly possible, a place where some of these scars can be smoothed away.

In a school such as ours which caters for girls who are educationally retarded, the use of visual and other educational aids is of the greatest importance. With the help of such aids educational difficulties can be much more easily overcome. Film slides, records and instrumental music all assist the girls to reach standards of achievement which it would be otherwise difficult to attain. Besides their educational value these aids have a beneficial effect on the emotional stability and general well being of the girls. The title of a recent thriller called "The Listening Eye" set us thinking about how much we owe in our work to these helps. We all came to the conclusion that without the Visual Aids at our disposal and an extensive library of good recordings our rate of progress would be greatly slowed down.

Units from the Foundation Film Library, a weekly film from the Education Committee's store, Unilever, Petroleum and other films supply us with a wealth of delightful entertainment.

The appreciation with which these films are received, the requests for encores, the amazing memory for detail in a second showing constantly surprises us. The lovely woodpeckers, the charming principals in the "Earth and its Peoples" series are all old friends and ever welcome. We know all about looking for oil and how to deal with forestry in any part of the world; and we can join in and sing with Toscanini's great choir. Curiously the real thing is more popular than the cartoon, "Laxton" much more acceptable than "Speed the Plough". By these means Saturday nights are a constant joy and the store of our knowledge is greatly increased with the minimum of effort.

On Sunday afternoons we follow a serial (*Spiritus Gladius*) of St. Paul, and share his exciting adventures, or at other times watch the very lovely colour series of the "Life of Christ" by Cathedral Films.

The sum of £40 0s. 0d. is allowed for recreational films and these showings are events of note. We prefer to spend our allowance on a few good ones in colour and we share these with our neighbours. "Robin Hood", "A Yankee at the Court of King Arthur", "Little Women", "Stanley and Livingstone", "Geordie" have been among our favourites, and "The Black Shield of Falworth" produced an orgy of jousting in the corridors!

Most of us think our own shows are much better than the public ones and Saturday night best of all.

Our growing collection of colour transparencies have added to this and an evening with the School plays renews pleasant memories of old friends and gives us new confidence in our own powers. Holidays too can be shared.

To the retarded child the printed word could never open so many doors. But once these doors are open and interest roused, the standard of reading benefits automatically.

Our ears are still in good use as well. We have a splendid collection of L.P. records and several good record players. We listen as we embroider or sew or mend or paint, or make baskets. We are never tired—it may be Pat Boone, or Berlioz, or Robeson, or Kathleen Ferrier; well as we know them, we listen again and again.

Recently we have had a Pianola given to us and 197 rolls for use with it. It is our fourth piano and we have an organ as well. We are never dull.

It is our task to find the right key for the rusted locks of many minds. For us the film, the colour slide, and our music provide the oil to make the opening easier.

#### *Kingsdon Manor School for Senior Boys, Somerton*

G. A. Morris

During the past twelve months there has been an average of sixty boys on the registers of the school, with an average attendance of 98 per cent. The intelligence quotients of the boys range from 52 to 85, with the majority between 60 and 70.

There have been no epidemics of any kind and the health of the boys has been very good with no serious accidents. There has been no infectious disease even though there have been several outbreaks of mumps and measles in the village.

The greatest difficulty has been in getting parents to co-operate in keeping appointments with their children at the various eye and dental clinics in Bristol during the holidays.

All the boys are registered with the local General Practitioner, Dr. M. J. Foley of Somerton. He has been most helpful and very prompt in answering any call upon him. I should also like to acknowledge the co-operation which we have received from the local dentist and the hospitals who have been most helpful in giving emergency appointments.

One of the School Medical Officers, Dr. A. M. Fraser, visits the school each term to ensure that each boy has an annual medical inspection.

Most of the boys will have been immunised against diphtheria by the time this report appears in print. It has also been decided that all new pupils will be immunised before they are admitted.

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In addition to the children at the Authority's residential special schools, the following children were being maintained in independent schools for E.S.N. children.

		Boys	Girls	Total
Besford Court R.C. School, Worcestershire	..	..	6	—
Clyffe House School, Dorset	..	..	1	—
Stokesbrook School, Filton	..	..	—	1
Aberley Ridge School, Stroud	..	..	—	1
High Close School, Wokingham	..	..	—	1
Meadows House School, Kent	..	..	1	—
All Souls School, Middlesex	..	..	—	1

## **Ineducable children and E.S.N. school leavers**

A.L.S.

On 1st November, 1960, Section 11 of the *Mental Health Act, 1959*, was brought into operation. This Section amends Section 57 of the *Education Act, 1944*, substituting new Sections 57, 57A and 57B for the present Section. This new legislation provides that in the case of a child found to be suffering from a disability of mind of such a nature or to such an extent as to make him unsuitable for education at school the decision shall be recorded, and the Local Health Authority shall be furnished with a report of the decision. The period during which a parent has a right to refer the case to the Minister of Education before the decision is recorded is extended from 14 to 21 days, and when a decision has been recorded the parent may now, not earlier than twelve months after the recording or more than once in any subsequent twelve months, request the Local Authority to review the decision. The use of the term "ineducable" has now been discontinued and "unsuitable for education" substituted.

The *Mental Health Act* also contains provisions empowering Local Health Authorities to compel the attendance at training centres of children who have been found to be unsuitable for education at school. The general effect of this new legislation is to provide parents with greater safeguards and to give them a right to call for a periodic review of the case. The Minister emphasises the desirability for an informal and friendly approach to parents in dealing with children who are handicapped in this way, and the need for full information being given as to the Authority's intentions and purposes and of the parents' own rights in connection with the placement of their child. The arrangement for the issue of a report to the Local Health Authority that a child may require supervision on leaving school has now been discontinued.

Up to the end of October, 1960, 65 children were reported to the Local Health Authority for the purposes of the *Mental Deficiency Acts*, 32 under Section 57 (3) and 33 under Section 57 (5) of the *Education Act, 1944*. Since 1st November the Committee have registered their intention to record a decision in the cases of 6 children found to be unsuitable for attendance at school, and the parents have been notified of this decision. Information has also been passed to the Local Health Authority concerning 4 children leaving special schools at the end of the year who it is thought will require some care or guidance after leaving school.

<i>E.S.N. School Leavers to 31st October 1960</i>	<i>From Special Schools</i>	<i>From Ordinary Schools</i>
Reported to the Local Health Authority under Section 57 (5) of the <i>Education Act</i> .. .. .. .. .. 24 9		
Referred to After-Care Officer .. .. .. .. .. 10 17		
Referred for supervision by Children's Officer .. .. .. .. .. 4 —		
No supervision necessary .. .. .. .. .. 10 18		
	Total ..	48 44

## **Maladjusted Children**

At the end of the year there were 40 children (28 boys and 12 girls) placed by the Authority at various residential schools or hostels for maladjusted children. This compares with 33 children (21 boys and 12 girls) in 1959. The number of girls placed in schools or hostels is the same as in the previous year, but the number of boys has increased from 21 to 28. Efforts are always made to place children in this part of the country but for special reasons it is sometimes necessary to place a child at a school at some distance from the City.

Details of the schools and hostels attended by maladjusted children at the end of the year are as follows:—

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Sutcliffe School, Winsley, Wilts.	.. .. ..	5	5
Munham House School, Sussex	.. .. ..	2	2
Edward Rudolf Memorial School, Dulwich	.. .. ..	—	1
Redhill School, Kent	.. .. ..	1	1
Chairey School, Thelwall, Lancs.	.. .. ..	1	1
Swalcliffe Park School, Oxon.	.. .. ..	1	1
St. Peter's School, Horbury, Yorks.	.. .. ..	—	2
Breckenborough School, Yorks.	.. .. ..	2	2
Bourne House Hostel, Lincs.	.. .. ..	—	2
Pittsburgh House Hostel, Stoke-on-Trent	.. .. ..	—	1
Whatcombe House School, Somerset	.. .. ..	2	2
St. Ann's Special School, London	.. .. ..	—	3
St. Andrew's School, Bridgwater	.. .. ..	4	4
Cotswold Chine School, Glos.	.. .. ..	1	1
Pitt House School, Torquay	.. .. ..	1	1
St. Rose's Convent School, Stroud	.. .. ..	—	1
Halcon House Hostel, Taunton	.. .. ..	—	1
Cam House Hostel, Dursley	.. .. ..	2	2
Heathercombe Brake, Manaton, Devon	.. .. ..	1	1
St. Michael's Hostel, Uckfield	.. .. ..	—	1
St. Margaret's School, Stockland, Nr. Bridgwater	.. .. ..	3	3
Drayton Manor School, Sherfield on Loddon, Hants.	.. .. ..	1	1
Peredur Home, East Grinstead, Surrey	.. .. ..	1	1
	—	—	—
	28	12	40
	—	—	—

### Delicate and Physically Handicapped Children

#### *Periton Mead Residential Open Air School*

C. Organ

During the year 36 Bristol children were admitted to Periton Mead School and 7 children from other authorities. The number of children on the registers at the end of the year was 52. Most of the children are admitted to the school because of asthma or general debility. Some of the asthma cases suffer from eczema also. Most of these children do well in Minehead and the debility cases thrive on good food and country air. Although the improvement in the health of the children is the primary concern at Periton Mead, the academic side is also well maintained and two of our asthma pupils gained grammar school places during 1960. Some of the admissions this year have been children whose health has been affected by emotional disturbances in their homes. In most cases the transfer to a happy, healthy atmosphere has done a great deal for these children.

#### *Report of the Medical Officer*

P. Tomlinson

This residential school at Minehead has continued to provide facilities for delicate children during the year. At the end of 1960 there were 52 pupils on the roll. Seven of these children were from other authorities. There were a small number of vacancies for girls at the end of the year chiefly due to the reluctance of some parents to allow their children to leave home for a short period. It is felt that the advantages of a period at Periton Mead should compensate for this factor.

*South Bristol Open Air School*

C. Williams

The school roll at the end of the year was as follows:—

			<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Delicate .. . . .	..	..	25	15	40
Physically handicapped	..	..	50	24	74
Partially-sighted	..	..	16	5	21
			91	44	135

The above totals, however, tell only part of the story. Many pupils suffer from two or more disabilities but are listed under one. Included in the figures are many E.S.N. pupils, a dozen epileptics, several maladjusted children and a partially deaf child. All these of course, are recognised as separate disability categories by the Ministry of Education and this shows that our problem is complex.

During the year 45 names were taken off the register, and 43 added. Movement on this scale is unavoidable but is bound to have a braking effect on the educational progress of the individuals concerned and on the school. Many visitors have come to see something of our work; doctors, nurses, students and teachers, some from as far afield as Sweden, France, Uganda, Somaliland and Formosa. To give particular guidance and assistance we have had visits from an orthopaedic surgeon (for his usual very welcome termly clinic), psychologists, a psychiatric social worker, an H.M.I. and our own inspector of schools.

Several educational visits were made during the year, the main one being in May when nearly all the school and several parents spent an enjoyable day in London. Smaller parties visited a local factory, a secondary school, a warship, and the Severn Wild Fowl Trust. A local firm also invited 36 pupils to be its guests at a City pantomime. Christmas found our good friends, individuals, other schools, and business groups as generous as ever. But it is sometimes difficult to accept gifts and kind invitations without establishing or reinforcing the false belief that a handicapped person is entitled to special help of this kind. To counter that we give when we can. An example was provided at our Harvest Festival when the gifts were sent on to the Corner Cottage Settlement. A wrong attitude of mind is sometimes of greater consequence that the degree of physical disability in producing a "cripple" to use the ugly word still in use. This sensitivity is not just South Bristol's; think how many times we prudently choose the euphemisms plump, or well-built, or slim.

*Home Teaching*

The work of this smallest but not least important section of South Bristol Open Air School's work continued and was extended during the year. The two full-time teachers were assisted in June by a temporary teacher who was able to give nine hours weekly until the end of term. Mrs. Bonner commenced in September to provide an extra five sessions a week. This enables home-bound pupils either to be visited more frequently or for longer periods.

Another improvement might have been secured before the end of the year. The pupils' sense of isolation could have been eased by establishing a link by portable two-way radio between school and home. A major radio manufacturer's very generous offer of the necessary equipment is still open, but it has not yet been possible to obtain the G.P.O.'s permission.

The roll stood at 21 at the end of the year, 13 boys and eight girls. Thirty-nine names were taken off the roll during the year for the following reasons:—

	<i>Boys</i>	<i>Girls</i>
Returned to ordinary school	.. .. ..	10 8
Admitted to Open Air School	.. .. ..	5 2
Admitted to other special school	.. .. ..	1 —
Admitted to training home	.. .. ..	— 1
Admitted to hospital	.. .. ..	3 4
Admitted to convalescent home	.. .. ..	— 1
Of age	.. .. ..	1 2
Died	.. .. ..	— 1
	—	—
	20	19

The teachers' joint total of visits during the year was 1,868.

#### *Hospital Teaching*

The two schoolmasters, aided by a woman student teacher at the Children's Hospital for two terms, continued this useful service. The greater part of their time is spent at this hospital where 377 children were visited during the year.

Southmead Hospital is visited by one of the teachers on three afternoons a week and the total number of children seen during the year was 195. However, the stay of children here is usually brief. It is appreciated that the Sister of Ward M has made available a small room for study purposes, and that there is a television set which is used to receive school broadcasts.

Only eighteen children were visited at the Bristol Royal Infirmary in 1960, but the teaching service there is restricted to children who are likely to be in hospital for a minimum of three weeks.

It will be seen that the total number of pupils visited again moved down. The year's total was 590 (as against 634 for 1959) but the range taught was as great and the teachers had no easy task to deal with the constantly-changing children in the hospitals.

#### *Report of the School Medical Officer*

P. Tomlinson

The number of pupils attending the school at the end of 1960 was 114. Of these 74 children were classified as physically handicapped and 40 as delicate. The principal conditions from which these children were suffering were:—

Post poliomyelitis paralysis	..	20
General debility	.. .. ..	17
Muscular dystrophy	.. .. ..	12
Epilepsy	.. .. ..	11
Cerebral palsy	.. .. ..	9
Asthma	.. .. ..	8
Congenital cardiac disease	.. .. ..	5
Amyotonia congenita	.. .. ..	3

Two items of interest in the above list are firstly, the increase in the number of children with epilepsy attending the school. Some of these children have frequent fits with possible detriment to the other children, and it is felt that it would be undesirable to increase the number of children with epilepsy above the present figure. Secondly, there is an increase in the number of muscular dystrophy cases from 8 to 12, compared with last year.

There were 31 new admissions to the school in 1960 consisting of 16 physically handicapped children and 15 delicate children. Five of these new cases were suffering from epilepsy. It is of interest to record that there was only one case of post poliomyelitis paralysis of recent origin admitted.

During the year 35 children ceased to attend the school for the following reasons:—

Returned to ordinary school	..	..	20
Transferred to other special schools	..	..	5
Reached school leaving age	..	..	4
Put on home tuition	..	..	3
Died	..	..	2
Moved from Bristol	..	..	1

Thirteen children were admitted to hospital schools during the year, and then re-admitted on discharge. Nearly all the admissions were to Winford Orthopaedic Hospital. The visits every term by the Orthopaedic Surgeon were continued during the year.

There has been a continual demand for places in the school during 1960, particularly for children in the younger age groups. Although the school has always had its full complement of pupils the Headmaster has nearly always been able to make a place for the deserving case without delay.

### Epilepsy in School Children

A.L.S.

Of recent years there has been a marked improvement in the condition of school children who suffer from epilepsy. Modern medication has resulted in many more children being able to take their place in the ordinary school. With the diminution in the number and severity of the fits many children are able to work up to their true potential of ability in contrast to former times when so many depressant drugs were used with consequent unfortunate effect on the progress of children in school. In Bristol it is estimated that at least 17 per cent of school children have some sort of epileptic episodes. This is probably an under-estimate since many mothers still will not freely confess the occurrence of occasional fits which might take place in the evening, during sleep, or in the early morning. It is also possible that a mother may anticipate a fit or a group of fits by noting a true aura or abnormal behaviour of her child and take the precautionary step of withdrawing the child from school at the time of the expected occurrence of the fit.

The national incidence, as found by Dr. Peter Henderson, some years ago was 2 per cent of the school population but there is some evidence that even this may be a low estimate. Children who have fits can cause a severe disruption in school life more marked perhaps in the secondary school than in the primary school. It is also true that the larger the child the more concern is usually expressed at the physical risk to himself or those about him during a fit. On the other hand, it is remarkable how well epileptic children are managed in the schools by sympathetic and understanding teachers. In fact, only two children at present are placed by the Education Authority at Lingfield Hospital School for Epileptics in Surrey. It is the policy at this school wherever possible to adjust the way of life and medication of the child so that he can return to the ordinary school and in quite a high proportion of the cases this result is attained inside two years.

Eleven other epileptic children are placed at the Local Education Authority's South Bristol Open Air School at Novers Hill as delicate children. This is a fairly recent development and is only possible by the good offices of the Head of the school and the presence of the nurse who is available full-time to deal with any casualties. There is obviously a limit to the number of epileptic children who can be dealt with in this way, but the arrangement has proved a very useful half-way house in providing special educational treatment, especially for the younger epileptic child.

When children who are known to have had epileptic attacks reach school leaving age, the School Health Service is responsible for advising the Youth Employment Officer about the employment risks involved. The parents are usually asked to allow the child to go on the Disabled Persons register so that he can receive special consideration in placement in employment. One is bound to comment that although much progress has been made in recent times in the attitude of employers to the epileptic employee, there is still much misunderstanding and fear of the consequences of this disability. It is believed that it is best for an epileptic person to be quite frank with a prospective employer, who is then able to make suitable allowances for the employee. On the whole, one feels that there have been such advances made recently in caring for the epileptic child and with such good results that one can look forward to more progress in the future—such is the pace of advancement in the production of new remedies for this disorder.

## Spastic Children

Grace E. Woods

### *Cerebral Palsy Assessment Clinic*

The Cerebral Palsy Assessment Clinic has continued to be held each Monday afternoon at the Children's Hospital. Many of the new cases seen during the year have been very young. At one time there were eleven cases of hemiplegia under the age of two years receiving physiotherapy. We have become increasingly impressed with the value of early treatment, and it is hoped that suspected cases will be referred to the Clinic even before one year of age. The improvement brought about by early treatment is reflected in the children in the nursery unit at Claremont School. Many of our visitors have remarked on the liveliness, mobility and normal play of these children. Interest in the early diagnosis of cerebral palsy has been stimulated by an invitation I received to read a paper on the subject at the Eighth World Congress for the Welfare of Cripples in New York in August.

There is now a widespread interest in the problem of the brain damaged child with minimal motor handicap, and cases in this category have been referred to the Clinic for full neurological examination and appraisal of the educational difficulties. Dr. Peter Henderson of the Ministry of Education has asked for reports on these children and one was sent from the Clinic. There may be a fair number of these cases in ordinary schools who need assessment and understanding. The following child, known to me from birth, illustrates the type:—

S.Mc. Her mother attended an antenatal clinic which I held and twins were diagnosed. The second twin S. was born fifteen minutes after the first, following a difficult delivery due to partial placenta praevia. He had white asphyxia and did not breathe for 15 minutes. During the neonatal period he had convulsions and was severely ill. However, on leaving the hospital he made steady progress and only appeared to be slightly behind his girl twin. He walked at 16 months and talked before two years. After the age of two years he was not followed up at the Clinic as he appeared to be normal and we did not wish to worry the mother. After five years, at the age of seven, he was referred quite independently to the Clinic. He had been noted in school to have a speech defect, a general inco-ordination of movement, was easily knocked over and was backward in class. On neurological examination there were minimal but definite abnormal signs and the E.E.G. showed localised abnormality in left fronto-parietal region, presumably accounting for the speech defect. There were no behaviour problems. His mother was placid and accepting of the child's

disability. He illustrates a type of brain damaged child who will need to be watched.

Another aspect of cerebral palsy which is now causing national concern is the ineducable spastic. There are 157 such cases on our files which are drawn from Bristol and district. Many of these are of very low intelligence, epileptic and unable to walk. They occur in every social group and each one is a family tragedy. Many could make some progress with training and be less of a burden to their family. At present some attend the Special Care Unit at Marlborough House Training Centre, and some are catered for at the Bristol Spastic Centre. There are a number in mental deficiency hospitals and a large number on the waiting lists for admission. It is hoped that when the new Bristol Training Centre is built, all children of this type living in Bristol will be able to attend and so relieve the mother of the burden of day-time care.

In addition to provision for the severely mentally handicapped home-bound cases, there is a need for places to accommodate severely physically handicapped cerebral palsy cases who cannot obtain outside employment on leaving school. Many, perhaps all, of these could do very simple factory work, which involves a few arm movements only. There are jobs of this sort and it is hoped that a Work Centre will be built under voluntary auspices in Bristol to give this type of employment. Dr. Wedell, Educational Psychologist, has made a survey and has found thirty-five adults under the age of 30 years who would come into this category, and every year there will be one or two similar children leaving Claremont School. There is a further group of adolescent spastics who need special training when they leave school, if they are to obtain independent employment. A few have been sent to resident training centres and one hemiplegic girl has gone to Colwall Court, a new centre opened by the National Spastics Society.

Habilitation of these children has been assisted by the staff of the Ministry of Pensions, who have provided equipment and readily made all the necessary adaptations. Push-chairs, wheel-chairs, home-chairs, specially made cot transport and tricycles have all been sent where the need is.

The work with cerebral palsy children is thus widely varied from the care of the infant to that of the school leaver, from the intellectually bright to the extremely mentally handicapped, and from mild brain damage to severe motor disability.

#### *Claremont School for Spastic Children*

M. Ram

During 1960 we have had 40—41 children on the register, ending the year with 24 girls and 17 boys.

Since the school opened, we have had a majority of girls among the pupils, and in this we have been, apparently, unique among schools for the cerebrally-palsied. Now the disproportion may be growing smaller; in the Senior Unit we have seven girls and three boys, but among the younger children the proportion is 17 to 14.

Another change is appearing in the proportion in which the two main forms of the handicap are represented. Of the children who were seven years old and younger at the end of 1960, eleven were spastics and three athetoids. At the same period in 1955 there were 13 spastics and 8 athetoids in this age group, and in 1957 five spastics and 10 athetoids. There are still some partially deaf children in this youngest group, but the bulk of those with severe high-frequency loss are now in the Junior Section.

Thanks to the very helpful attitude of the Head Teachers and staffs concerned, we have been able to place two more children in the neighbouring Henleaze Primary Schools and another is to follow in January. They will continue to come to Claremont for physiotherapy and speech therapy.

Preparations have been going ahead to provide the older boys with training in handicrafts, and it is hoped to make a start early in 1961. Mr. Goddard, one of our Schools' Inspectors and I visited the Thomas De-la-rue School for Spastics at Tonbridge, to see how a woodwork syllabus had been worked out there and how the handicraft masters had devised aids and adaptations to enable severely handicapped boys to handle the ordinary woodworking tools. With their generously given permission, we hope to put these methods into practice at Claremont.

As part of the training in self-help which has been planned for our Senior Unit, the children from it were taken in June to stay for a week at the National Spastics' Society Hostel at Bexhill-on-Sea. Most of them had never been away from their parents before, and all are heavily handicapped. The object of the expedition was to show them how, with suitable gadgets and aids, they could attain a considerable degree of physical independence. It was an enjoyable, if strenuous week, and the children are eager to go again next year. Other less ambitious journeys and visits were arranged as well, to theatres and concerts, and (for the youngest children) to the Zoo. We did not go to Weston-super-Mare this year, but one of the Weston donkeys, "Silver", was given to us by the proprietor, and is now a much-loved member of the school outdoor staff.

## HEART DISEASE AND RHEUMATISM

C. Bruce Perry

As the figures published in the table show, the work of the clinic has continued on the same lines as before. There has been a slight increase in the number of new cases but fortunately the majority of these showed no incidence of cardiac involvement and were mild. This increase was mainly due to a small "epidemic" that occurred early in the year in and around Shirehampton where there must have been an epidemic of streptococcal sore throats, although this apparently did not come to light and was only revealed by the subsequent acute rheumatism which, being notifiable, was recognised. Once again, as far as can be ascertained, few, if any, of the children who developed acute rheumatism received what is now considered adequate treatment for the antecedent sore throat, neither was the causal organism identified. This is particularly disappointing especially in view of the full bacteriological service available. It is probably only by more careful attention to sore throats by both parents and practitioners that we shall be able to reduce still further the incidence of acute rheumatism.

## Summary of School Cases attending Cardio-Rheumatic Clinic, 1960, including Primary, Secondary, Nursery and Special Schools

	No treatment or restriction	No treatment but restriction of games, etc.	Treatment and school	Treatment and exclude from school	Institutional treatment	Total
<i>New cases:</i>						
Rheumatic heart disease	2	—	—	—	5	7
Chorea .. .	—	—	—	—	2	2
No organic disease ..	29	—	—	—	—	29
Congenital heart disease ..	4	2	—	—	1	7
Acute rheumatism ..	—	—	—	—	25	25
	35	2	—	—	33	80
<i>Re-examinations:</i>						
Rheumatic heart disease	89	6	—	—	—	95
Chorea .. .	9	—	—	—	—	9
No organic disease ..	236	1	—	—	—	237
Congenital heart disease ..	50	12	—	1	1	64
Acute rheumatism ..	205	—	—	—	1	206
	589	19	—	1	2	611
No. of individual children examined .. .	..	..	..	..	387	
No. of new cases for 1960 .. .	..	..	..	..	70	
No. of re-examinations .. .	..	..	..	..	611	
Total number of attendances .. .	..	..	..	..	681	

## INFECTIOUS DISEASES

A.L.S.

In contrast to the previous year, 1960 was a light year for measles cases, there being only 279 cases of this disease amongst children of school age compared with 2,058 cases in 1959. Scarlet fever cases were also fewer, 120 cases as compared with 173 in 1959. Whooping cough was more prominent, there being 167 school cases as against 74 in the previous year. The problem which caused a good deal of concern during the year was the sharp increase in the number of cases of infective hepatitis which totalled 890 during the year, though towards the end of the year the number of cases was tending to diminish. Families where cases of this disease had occurred were visited and advice given and Heads of schools where there were a number of cases were also advised on the hygienic measures to be taken.

The members of the teaching staffs of schools most severely affected were offered protection against the disease by injections of Gamma Globulin, and this was given to all those who wished to have it. Incidentally this protection was also offered to expectant mothers who were contacts of their affected children. It is not possible to say how much effect this has had in influencing the control of the epidemic. The disease was made notifiable in November, 1960, but before this time the general practitioners had co-operated well in giving notifications voluntarily.

As a result of some disquiet about the continuance of infections of a food poisoning type, mostly Salmonellae, and of the recent occurrence of infective hepatitis which is believed to be intestinally transmitted, a review was undertaken of the cleansing and hygiene arrangements carried out by caretakers in schools.

The following instructions were issued to the caretakers of the Authority's schools on the use of cleansing agents and germicides.

"A good deal of research has been undertaken in an effort to combat the various types of infection which have recently been notified in schools. As a result it is strongly recommended that the following treatment should be applied to certain areas in schools, viz. changing rooms, showers or footbaths, sports pavilions, cloakrooms, gymnasia and rooms where any form of activity is carried out in bare feet.

The floors of these places should be treated at the end of every morning and afternoon session with a solution in the proportion of two tablespoons full of the approved germicide in a 2-gallon bucket of warm water. Seats should also be wiped over with a cloth soaked in this solution. An extensive treatment on similar lines should be carried out immediately before the opening of schools after holiday periods. Bathrooms in housecraft flats should also be regularly cleaned with the same solution. The germicidal qualities of the solution will not be impaired by the further addition of about one-third of a pint of detergent to each bucket of water and this will materially assist in the removal of dirt and stains. In showers and footbaths the floors can be thoroughly washed down and the final rinse made with this solution, floors then being left to dry of their own accord; this will give a maximum period of germicidal effect. It will obviously be undesirable to use the solution in similar quantities on floors of gymnasia, changing rooms and assembly halls where physical activities may be carried on in bare feet. In these cases, it is suggested that a light mopping with the same solution be carried out, care being taken to keep the actual amount of liquid introduced on wood floors to a minimum. If the latter type of floor has been sealed as outlined in a previous memorandum to caretakers, no harm will be caused provided no surplus liquid is allowed to remain on the floor. In addition, these floors should be swept daily with the compounds mentioned in the earlier memorandum, as all the sweeping powders have some germicidal content.

A solution in the proportion of two tablespoons full of germicide and one-third of a pint of one of the approved detergents to a two-gallon bucket of warm water should be used for sluicing floors of outside toilets. Floors of indoor toilets should be mopped with the same solution, which should also be used for daily cleaning of taps and washbasins, doors, door knobs, chain handles, partitions and walls, these being wiped over with a cloth dipped in the solution. W.C. seats should be similarly treated, both sides of "lift-up" seats and the exposed part of fixed seats being wiped over carefully. Mops, brushes and floor cloths should be thoroughly washed out after each operation and rinsed in a solution of germicide.

Water closets should be checked at intervals during the day to see that they have been flushed after use. This particularly applies in Infants' schools.

Measuring pumps will be provided in all schools. These pumps may be fixed to the top of the drum to measure the appropriate amounts of germicide to use for the various operations detailed in these instructions. Two strokes of the pump dispense two tablespoons full of the germicide and this, in a two-gallon bucket of water, gives a suitable dilution.

The solution described above is suitable for most school purposes, but special treatment may be necessary to remove stains from urinal stalls. In the past some caretakers have used spirits of salts. This should not be used because of its corrosive effect; chloride of lime (in liquid or powder form) or soda ash should be adequate if cleaning is carried out frequently and regularly."

The details of the cases of measles, whooping cough, and scarlet fever occurring amongst school children and pre-school age children during the year are as follows:—

	<i>School age children</i>	<i>Pre-School age children</i>
Measles .. .	279	276
Whooping cough .. .	167	228
Scarlet fever .. .	120	57

Admissions of patients of school age to Ham Green Hospital during the year totalled 184, the average stay of patients being 19·7 days.

### **Poliomyelitis Vaccination**

Following the intense campaign conducted in 1959 to secure the immunisation against poliomyelitis of school children, the number of children immunised during 1960 was considerably below that for the previous year. Among children of school age 796 received a full course of two injections and 5,510 received a booster injection during the year. The total number of school children who have been given this protection is now approximately 61,000 out of the total school population of 66,490, which shows a percentage of 91·7, a very satisfactory position concerning the protection of school children against this disease. There were no cases of poliomyelitis among children of school age during the year.

### **Immunisation against Diphtheria**

Towards the end of the year a campaign for increased immunisation against diphtheria of school children was commenced in the schools following one or two cases of this disease which had occurred elsewhere in the country. Up to the end of the year 553 children of school age were given a full course of three injections and 7,761 were given a booster injection. When this campaign is completed in 1961 it is hoped that the level of protection against this disease will have reached a more satisfactory point. There has again been no case of diphtheria amongst children in the City, the eleventh successive year in which this has been the case.

Concern still continues that the need for diphtheria immunisation tends to be treated lightly by the general public. Experience in other towns has shown that diphtheria is still a risk that has to be faced, and the possibility of an epidemic arising cannot be ruled out. A far greater proportion of children should be protected against this disease, and it is believed that until at least seventy-five per cent of the child population has been protected there will always be a risk of the disease gaining a foothold in the City.

### **MEDICAL INSPECTION**

A.L.S.

A complete periodic medical inspection was made during the year of 19,329 children attending the Authority's Primary, Secondary and Special schools. The statistical tables relating to these inspections can be found at the end of the report.

## Co-operation of Parents

The number of parents present at periodic medical inspections during the year was as follows:—

<i>Age groups inspected (by year of birth)</i>	<i>No. examined</i>	<i>Parents present</i>	<i>Per cent</i>
1956 (and later) .. .	904	831	91.92
1955 .. . .	833	593	71.19
1954 .. . . .	3,585	3,186	88.83
1953 .. . . .	1,242	1,041	83.82
1952 .. . . .	401	287	71.57
1951 .. . . .	749	513	68.49
1950 .. . . .	2,042	1,550	76.39
1949 .. . . .	1,624	1,218	73.76
1948 .. . . .	722	378	52.62
1947 .. . . .	650	250	38.46
1946 .. . . .	1,471	478	32.49
1945 (and earlier) .. . .	5,106	1,509	29.55
	<hr/> <b>19,329</b>	<hr/> <b>11,834</b>	<hr/> <b>61.17</b>

## Infestation

The number of individual children found to be infested and the percentage of those children of the school population again shows a downward trend, and the figures are the lowest so far recorded, the percentage figure being only 1.3 per cent of the school population for 1960. The figures relating to this year and the five preceding years are as follows:—

	<i>No.</i>	<i>School population</i>	<i>per cent</i>
1955 .. . .	2,347	65,177	3.6
1956 .. . .	2,133	65,979	3.2
1957 .. . .	1,841	66,439	2.8
1958 .. . .	1,584	66,555	2.4
1959 .. . .	1,278	66,700	1.9
1960 .. . .	869	66,490	1.3

The intensive campaigns which have been undertaken and the constant supervision of the families of known offenders, coupled with the rising social standards, have been reflected in the continued reduction in the numbers and the percentage of the school population who are found to be infested. In those schools where infestation still causes concern, arrangements are made for the health visitor to carry out a routine inspection of all the children immediately after holiday periods and at other times where necessary. There is of course still the hard core of special families who require constant supervision to prevent the condition recurring. It is hoped, however, that in time these cases will become fewer in number and that infestation will cease to be a problem in the schools.

## Medical Inspections at the College of Technology

Mention was made in the report for 1959 of the proposed arrangements for the routine medical inspection of the pupils at the College of Technology and the proposed College of Science and Technology which opened in 1960. It was agreed by the Governors of the College and by the Education Committee that arrangements should be made for the routine medical examination on a voluntary basis of students entering the College in September, 1959. Dr. Tomlinson, one of the Medical Officers, was allocated to this work, and 60 of the students who had given their consent were medically examined during 1960.

It was agreed that for students entering in 1960 or in subsequent years that they should be recommended to accept routine medical inspection, and arrangements are being made to carry out a full medical inspection of the entrants to the College in 1961 and subsequent years.

### **Medical examination of entrants to the teaching profession**

The arrangements for the medical examination by the Medical Officers of the Local Authority of candidates applying for entry to training colleges and entrants to the teaching profession were continued during the year. Altogether 227 candidates were examined in connection with admission to or on leaving training colleges, and 146 teachers were examined on appointment in Bristol or for some other reason. In a further 107 cases the examination was carried out by other Authorities, and this Authority dealt with medical examinations for other Authorities in 28 cases.

### **MILK AND MEALS IN SCHOOLS**

T. B. J. Hetherington

The number of children taking the meal increased in September to 26,952 per day—the highest figure yet reached—2,338 free and 24,614 paid—i.e. 45·03 per cent of children in attendance throughout the City. The total number of meals produced daily reached 32,000 including those supplied to teaching and other staff, Institutions of Further Education, Independent Schools and the Marlborough House Training Centre. Altogether 1,161 staff were employed in school kitchens and canteens. New kitchens were opened at Brislington School (second kitchen) and Lockleaze School, now making a total of 102 kitchens supplying meals to 217 school departments. Some of these kitchens are also dealing with beverages, snacks, catering for courses, sports, etc. The main task, however, remains the provision of a well cooked appetising, balanced meal at less than 10d. per head for food. It is still a great challenge to ensure that the required nutritional content of the meal is attained. In order to achieve the 20 grammes of animal protein out of the required 30 grammes of total protein, approximately half the cost of the meal is spent on this one item and a large proportion of the meat bought must necessarily, because of cost, be frozen rather than chilled or English. It is interesting to note that over recent years we have widened the variety of the sources of protein and the "non-meat" meals tend to become more popular. The analysis of the content of individual meals shows that the majority are well up to standard and there is a greater understanding among the staff of the nutritional requirements, a wider variety in menus and a break down in the "bulk" in which the meals are cooked.

Courses have been held at the Training Kitchen throughout the year, staff have continued to attend courses of training at the Bristol Technical College and two supervisors passed the Royal Society of Health (Nutrition) Examination held at the University in September, 1960.

The percentage of children taking milk under the milk-in-schools scheme increased to 83·77. The figure for 1959 was 82·82.

### **MILK, FOOD AND HYGIENE INSPECTIONS**

F. J. Redstone

The work of the public health inspectors associated with schools and school kitchens—sampling foodstuffs, investigating complaints and cases of disease associated with food has continued during 1960 without untoward incident.

Cases of dysentery occurring in the south side of the City were numerous but not confined to pupils of any particular school and there has been no known

outbreak of food poisoning. Two nurseries where a number of dysentery cases occurred in the latter part of the year, gave rise to many visits and re-visits by public health inspectors.

A few complaints were investigated relating to unsatisfactory bottles of milk delivered to schools. A serious one was a child's discovery of small particles of glass in a bottle. It could not be established at which point the glass entered the bottle, but the matter was taken up with the dairy company and the whole staff was addressed by an inspector. School milk bottles continue to give dairy companies more trouble than other types, and many hundreds have to be set aside for destruction or for special cleansing because of the condition in which they have been returned from schools.

During the year 124 samples of milk were secured on delivery to schools and submitted to the statutory tests. Very exceptionally, five samples secured on two different days failed the phosphatase test of heat treatment. Investigation revealed plant failures which were immediately reported to the plant engineer. Subsequent samples were satisfactory. The methylene blue reduction test is not applied to milk when the storage temperature after sampling has exceeded 60° F. and this was the case in regard to eight samples; all taken on the 1st June, a significant reflection on the weather of last summer.

During the year 498 samples of various foods were secured for analysis from eleven school kitchens. In a few cases slight grub infestation or deterioration was discovered and the foods were destroyed or withdrawn from stock.

At the request of Dr. Bothwell, who was investigating infective hepatitis, samples of the water supply were secured from several schools. Although in some instances water taps to which children had access were supplied from storage tanks in roofs, no adverse reports on the samples were made.

A close working relationship continues with the Education Department's School Meals Organiser and her staff. On a number of occasions during the year problems in connection with kitchens and canteens, including infestations, were investigated and satisfactory conditions attained.

## NUTRITION CLINIC

Margaret Chapman

In the 1959 "Health of the School Child" it was reported that some concern was felt about the incidence of overweight and dental decay among children and that a factor influencing both of these, namely, the increased consumption of carbohydrates, was being condoned in many schools by the sale of biscuits and similar confectionery.

In looking for an acceptable substitute to sell instead of such commodities, it was thought worth while investigating the habits influencing mid-morning eating in schools, and the following information emerged from a small survey carried out in a secondary school attended by girls chiefly from the immediate neighbourhood, a good industrial employment area of the City.

Of 562 girls aged 11—18 years, who completed a questionnaire relating to their eating habits on a day in June, 48 (1 in 12) had eaten no breakfast at all, and a further 212 had eaten only bread and/or biscuits before coming to school, so that in all, practically half of the pupils (260) had received a nutritionally poor breakfast in that it provided no significant amount of animal protein, i.e. obtainable from milk, meat, cheese, fish or eggs.

Although one-third of a pint of milk is available free of charge to every child at school, 169 (30 per cent) did not have it on the day in question, and correlating this with the type of breakfast eaten it was found that 78 children (1 in 7) had neither milk nor a satisfactory breakfast, while 8 had no breakfast, no milk and nothing to eat at mid-morning.

Pupils were unable to leave the premises during the mid-morning break to buy food. They could bring it from home and buy biscuits or apples from the school shop.

It was found in this enquiry that 419 (74·6 per cent) ate something at mid-morning, but 50 children ate nothing and had no milk at mid-morning and 271 children spent a total of £4 1s. 11d. at the school shop, 255 spending 3d. or more. Of the total, £1 4s. 8d. was spent on biscuits, and £2 17s. 3d. was spent on apples at 3d. each.

This was the first day that apples had been for sale; previously between £2 3s. 0d. and £3 0s. 0d. daily had been spent on biscuits only.

The results of this investigation have been discussed at a number of Parent/Teacher and other Group meetings throughout the City and it has been pointed out that in addition to the immediate dental and overweight problems, other general health factors also might be involved.

Many people comment on the apparent fatigue, lack of concentration and mental confusion found among school children today. Nutritional research shows that all of these can be brought about by the prolonged fasting incurred through the omission of an adequate breakfast. Additionally, the formation of a habit of not eating breakfast could lead to an inadequate intake of protein in children because the normal quantities of milk, meat, cheese, fish and eggs provided at the other two main meals are unlikely to cover the requirement of first-class protein.

Discussion of the possible reasons for the decline in breakfast eating by children indicated that it was attributed by the audiences to (1) insufficient time being allowed for the preparation and/or eating of the traditional type of breakfast, through the family getting up late and/or mothers going out to work; (2) lack of knowledge of food values, aggravated by misleading advertisements, particularly when there was constant presentation of these as with television advertising. Economy was not thought to play a significant part in the decline, rather the reverse, for higher incomes seem to account for more being spent on biscuits which replaced other foods of greater nutritional value, viz. 155 children had eaten two or more biscuits before coming to school.

Mr. McCaig, the Principal School Dental Officer, has mentioned in his report, a letter which was sent to the Heads of all schools suggesting the sale of such things as apples, dried fruits etc. in school tuck shops rather than sweets and biscuits. Though the primary object of this letter was to try and reduce the amount of dental decay among children, this proposal, if carried out, would also have a beneficial effect on children from the dietary aspect. It is hoped that many Heads of schools will be able to carry these suggestions into effect.

## ORTHOPAEDIC AND POSTURAL DEFECTS

A.L.S.

The two Orthopaedic Surgeons of the Regional Hospital Board, Mr. Pridie and Mr. Jones, have continued to attend at the Central Health Clinic on one session per week during the year to see children suffering from postural disabilities. The figures for 1960 show little change in the case of school children, but the number of patients under school age is considerably fewer than during 1959, 79 as against 96. The figure for 1960 is however, about the average for children under five years of age seen during recent years. The only point of note in the figures for this year is an increase in the number of cases of tuberculosis of bones and joints which number five as compared with one in 1959.

In addition to the orthopaedic arrangements at the Central Health Clinic, Mr. Lucas has continued his visits once a term to South Bristol Open Air

School to advise on the problems of the physically handicapped children at the school. These visits have proved most useful and his advice is always welcomed by the staff.

The figures relating to the children seen at the Orthopaedic Clinic during the year are as follows:—

		<i>Age 5 years and over</i>	<i>Age under 5 years</i>
Paralysis (a) Flaccid .. .. .. ..		38	—
(b) Spastic .. .. .. ..		23	2
Tuberculosis of bones and joints .. .. .. ..		3	2
Congenital abnormalities of bones and joints .. .. .. ..		28	6
Amputations .. .. .. ..		—	—
Genu valgum .. .. .. ..		19	26
Various (Flat foot, spinal curvature, etc.) ..		351	43
		<hr/>	<hr/>
		462	79

## PHYSICAL EDUCATION

J. McA. Milne

In the latter part of 1960 the Wolfenden Report on Sport was published. This spot-lighted the need for better facilities, both indoor and outdoor, for more trained coaches and for a wider application of physical activities. In the case of facilities, improvements are taking place all the time, new playing fields and gymnasias are becoming available in the new schools and conditions in the older schools and existing playing fields are gradually receiving attention as far as the financial position allows. An outdoor swimming pool will soon be constructed at Withywood Secondary School and plans are prepared for the inclusion of a swimming bath at the new Secondary School at Hartcliffe. The new swimming bath at Filwood Park, construction of which has now been commenced, will provide the much-needed additional accommodation for the schools of Knowle West and Hartcliffe.

The physical education staff are well able to cope with demands of pupils in school but these demands leave very little time for a teacher to help youth or adult organisations and the increased number of coaches in various activities recommended in the Wolfenden Report will have to be recruited from sources other than the teaching profession. The report makes a plea for the greater recognition of some of the less popular pursuits such as camping, cycling, judo, canoeing, rock-climbing and the scope of physical education has been extended to include many of these activities.

The courses arranged for teachers during the year included Infant and Junior Physical Education, Educational Dance, Folk Dancing, Cricket, Tennis, Basket-ball as well as Lightweight and Heavyweight Camping, Trampolining, Swimming and Judo.

Netball and Rounders Tournaments have again been held including two Primary School Tournaments. The school County Netball teams have played against Somerset, Devon and Gloucestershire. The Bristol Association of Mixed Clubs and Girls Clubs have also held Netball and Hockey Tournaments. This year one school took part in the Lacrosse Tournament at Cheltenham and met many schools from the South-West of England and Wales. Other schools are now playing Lacrosse and show much enthusiasm for this very fast and skilful game.

Two children's Country Dance parties have been held in conjunction with the Bristol and District Branch of the English Folk Dance and Song Society.

A sword dance team from the choir of St. Mary Redcliffe Boys' School gave displays in several towns in Germany during their tour of that country.

Coaching evenings for rounders, both at Primary and Secondary levels have also been arranged. "Keep Fit" is becoming more popular and several leaders' courses and open evenings have been held in addition to a festival at which various groups took part.

Three girls and six boys were selected to attend the Outward Bound Schools this year. The courses were strenuous and very much enjoyed.

The Duke of Edinburgh's award scheme continues to flourish and the number of boys who have visited Buckingham Palace to receive Gold Awards from the Duke of Edinburgh is now 25. Roger Bullock, formerly of Greenway Secondary School and one of the first winners of this award was chosen as a member of Sir John Hunt's survey party to Greenland in August.

A number of teachers co-operated during the year in a Tests and Measurements Survey which was conducted on a national scale and when the results were published it was interesting to note that British boys were found to be generally superior to their American counterparts in all but one of the tests taken.

The demand for swimming is still increasing and it becomes more difficult every year to find accommodation for schools wishing to participate in this most useful activity. All secondary schools have periods allocated for swimming either in school time or after school hours, and the majority of junior schools also attend the swimming baths.

At a meeting of all organisations interested in swimming for the physically handicapped an "ad hoc" Committee was formed to explore possibilities of providing swimming facilities and giving assistance to handicapped persons of all ages. Arrangements have been made for the children from the Open Air School to have the use of Bedminster Down Secondary School Bath one afternoon per week and for the Bristol Spastic Association to have the use of the bath one evening per week. Helpers are provided by the Red Cross Association and the School.

During the year 3,386 four length certificates and many Royal Life Saving Awards have been gained. The Amateur Swimming Association medallist award for proficiency in swimming was gained by 200 boys and girls and 45 obtained the A.S.A. Advanced Award.

The Mimic Dance Theatre visited Bristol for one week and gave performances in various schools. The work which is based on modern educational dance principles was much appreciated.

School visits to discuss modern physical education were arranged for doctors taking the D.P.H. course.

Parent/Teachers meetings have been held in various schools and have proved very helpful, not only as regards clothing for physical education, but more especially for the help given by the doctor to individual parents on such things as thumb sucking and bed-wetting in children, and other behaviour disorders.

Miss Halonen, a midwife and nurse from Helsinki interested in accident research, gave great encouragement by her conviction that freedom to experiment on climbing apparatus was the greatest factor in preventing accidents.

Sports and games are efficiently run by the different school organisations controlling them and the standards compare favourably with those in other parts of the country. Successes nationally have been gained by boys in rugby, football, boxing and swimming with county honours in many other sports.

## PSYCHOLOGICAL SERVICE

R. V. Saunders

### *Educationally Sub-normal Children*

In this section of the Annual Report for 1957, one of the two chief points mentioned as requiring discussion was the need for re-thinking the role of the special schools in view of changes in the nature of their population, as a result of the setting up of a system of special classes.

In this connection, it is interesting to note in the 1960 International Conference Edition of "Forward Trends" (Guild of Teachers of Backward Children) that Mr. S. S. Segal, the Conference Adviser, says "One does not need to be a prophet to foresee that with a greater supply of skilled teachers of the backward in our ordinary schools, part of the population of our special schools will be able to shift upwards and be catered for within our ordinary schools. Similarly one can foresee the I.Q. floors and ceilings in Special Schools being lowered to include the most able of those now excluded from schools as ineducable."

If we do accept that such a change is taking place, it becomes necessary to consider such matters as the supply and training of teachers for this work, the nature and purpose of the ascertainment process, and the difference between special school and special class in ordinary school, in their educational aims, in the types of children they take, and in their methods and techniques for dealing with these children.

### *Ascertainment*

Lip-service is generally accorded to the idea that ascertainment should not be on the basis of an I.Q. score so much as on the basis of the child's adjustment and his social and educational needs. It is still unfortunately true, however, that the first item considered by doctor, psychologist, and teacher, is normally the child's ability test score, or I.Q., and that they tend to work on the figure obtained as the child's "true I.Q." How much are they impressed by the fact that the operation of purely chance factors in the obtaining of this score, obliges even the most skilled tester to say that the child's "true" score may be some three points more, or less, than the one he actually obtained? We should also add to this that with the Terman Merrill Test, which is the one most commonly in use, the spread of scores differs from one age level to the next, so that it is quite misleading to compare scores obtained at different ages unless they are "corrected" by using one of the standard correction tables now available.

In ascertainment, we should consider the nature and degree of the child's failure in the ordinary school setting in determining his need for special educational treatment in special school or special class. The I.Q. test should serve to indicate simply the ability level or grade of the child, with, frequently, incidental information about his reasoning, learning, and perceptual processes.

### *Special School and Special Class*

The special class should aim to keep the child adjusted to the environment of the ordinary school, at first by affording him substantial support and shelter, which should ideally become less necessary as time passes, until he should finally be able to join fully in the normal life of the school.

The children selected for treatment in special classes should therefore be those who at the time of ascertainment are judged to be capable of making this kind of progressive adjustment.

Children selected for special school treatment are likely in consequence to be those considered to be in need of a sheltered environment throughout their school days. This group is likely to include not only children who are severely impoverished intellectually but also those children who by reason of

their unadaptability or "rigidity" in learning situations, are not able to make use of their possibly fair intellectual ability, e.g. "brain damaged" children and certain emotionally disturbed children whose problems arise out of their poor ability and educational failure.

#### *Staffing*

These differences in function should be reflected in the staffing of special schools and special classes, both in the training and outlook of their teachers, and in the size of their classes. Where a child requires more assistance than a special class can give, and his learning difficulties are greater and more intractable, it seems necessary that he should be in a smaller unit. Classes in special schools require to be smaller than special classes in ordinary schools. (In this connection it is interesting to note the National Union of Teachers' recent recommendation to the Minister of Education that the maximum class number should be 15 pupils rather than the present 20.)

#### *Educational Aims*

The educational aims of the special class in the ordinary school require to be kept related to the aims of the ordinary school community in which it is situated. This means that more formal educational demands are likely to be made of it than need be made of the special school.

The latter has too long been expected to justify its existence in terms of intellectual attainments, at the expense of all-round personal development and a realistic approach to the life-needs of its pupils.

A franker recognition by all concerned of the type of service which the special school can give, and the type of pupil whom it has to help can result in a much freer and more experimental approach to its problems which should prove very rewarding in the long run.

## **SPEECH CLINICS**

Kathleen Coleman

#### *Southern Area*

This has been an interesting year, with many changes.

Whereas previously, the greater amount of time has been given to children who stammer, this year only a few stammerers have been under treatment and only a few cases of stammering have been reported. Schools that usually have several cases under treatment have remarked on the absence of this type of difficulty.

An interesting and new development is the increase of gross speech disability; children with an unrecognisable speech pattern who, although not deaf, appear unable to follow any sustained speech pattern. They can learn to make a sound, and combine a consonant with a single vowel sound, but are unable to follow more than two or three variations of sounds and give an impression of confusion. Cases of this nature appear from time to time, but this increase in numbers is interesting and suggests the possibility of some research.

Speech sessions have been started at the Amelia Nutt and Brooklea Clinics and are much appreciated. The Clinic at Granby House has continued as before. Sessions have been held at Connaught Road Junior School, and South Bristol Open Air School. The possibility of visits to Nover's Lane Junior School was considered, but although several of the children there have incorrect speech, it is a matter for speech training than speech therapy.

There is no doubt that much poor speech is the result of poor speech pattern and habits that children are allowed to develop, rather than to any defect of speech.

*Statistics 1960*

No. of cases in attendance January 1960	..	..	53
No. of new cases	..	..	116
No. of discharges	..	..	98
No. of children in attendance December 1960	..	..	71
No. of children attending in 1960	..	..	169
No. of attendances during year	..	..	1,459

## SPEECH THERAPY

Helen M. Streat

### Northern Area

Until the end of June, work was being carried on at the Portway, John Milton and Southmead Clinics, at Argyle Road Speech Clinic and at Henbury Manor and House in the Garden Special Schools.

In June Miss Johnson resigned and her sessions at John Milton Clinic and at Henbury Manor had to be discontinued.

Since October two weekly sessions at Argyle Road have been undertaken by Mrs. Gordon Thomson so that all Miss Johnson's patients from the District 5 area of Bristol have been reviewed and several have continued treatment.

At the beginning of December Miss M. J. Henshaw joined the staff and she is concentrating her work in the Southmead area, having carried out a thorough survey of the schools in that neighbourhood.

The Stammerer's Club has been meeting with considerable success. It is held at three-weekly intervals with an average attendance of six, and there has been a marked improvement in the speech of a number of the boys. The acquisition of the new tape recorder during the year has been of particular benefit to this group.

A good link has been established with Russell Town and House in the Garden Special Schools and it is satisfying that it has been found possible to give some necessary assistance to these two schools.

About a dozen pre-school children with delayed speech have been seen during the year. In some cases the advice and re-assurance given to parents have been sufficient for speech to show improvement but in several instances the children have come to the Clinic for a weekly play session. It is important that these children should be helped as much as possible before starting school and it has been found that they have settled more easily into school life when this help has been given. Each child is kept under close observation until speech is well established.

In the earlier part of the year a survey was begun to try to discover the approximate number of speech defective children attending Bristol schools. The speech of random groups of children in infant and junior schools has been assessed and some interesting results produced, one of which was the discovery of a large number of interdental sigmatisms. It is hoped that the assessment of the 14 year age group will be completed during the early part of 1961.

*Statistics for 1960*

No. in attendance January 1st 1960	..	..	53
No. of new cases	..	..	64
No. transferred to other authorities	..	..	4
No. of cases discharged	..	..	52
No. of cases receiving treatment on Dec. 31st 1960	..	..	57
No. of attendances	..	..	1,603

*Analysis of cases receiving treatment on December 31st, 1960*

Stammerers	..	..	..	..	..	..	..	11
Cleft palate	..	..	..	..	..	..	..	5
Dysarthria	..	..	..	..	..	..	..	1
Delayed speech	..	..	..	..	..	..	..	2
Dyslalia	..	..	..	..	..	..	..	38

*Speech Therapy at Claremont School for Spastic Children* Beryl Saunders

There has again been a slight increase in the number of children at Claremont requiring speech therapy—just over half the total of 40 on the register. Seven have treatment three times a week, 13 twice weekly, and three once weekly.

We have been much concerned this year with the diagnosis and treatment of language difficulties, or dysphasia. There are children with limited language development, where intellectual, environmental, and physical factors are not sufficient to account solely for such poor acquisition of language. The problem is largely on the executive side, but one or two children have a receptive dysphasia also. Treatment is complicated by motor handicap, severe in some cases, as the approach must be visual and kinaesthetic, and sometimes the presence of a partial hearing loss adds further to the difficulty of "getting through" to these patients. The co-operation of the teaching staff is a most necessary aid to therapy.

Last year we were much concerned with the provision of dental treatment for our children. With the co-operation of the Bristol Dental Hospital some severely handicapped children are now receiving treatment there, but it is disappointing that few parents have availed themselves of the services of the panel of dentists willing to treat less severely affected children which was compiled with the assistance and co-operation of local dental surgeons and Dr. Grace Woods. Despite a circular letter sent to all parents, and lessons on dental care and hygiene at school, regular dental inspection is the exception. This is to be deplored all the more as many cerebral-palsied children would be unable to tolerate the wearing of dentures, and optimum conservation of their teeth is therefore of the greatest importance.

The figures for the year are listed below:—

Under treatment 1st January 1960	..	..	21
Admitted	..	..	4
Discharged	..	..	2
Under treatment 31st December 1960	..	..	23
Total no. of children treated 1960	..	..	27
Total no. of treatments 1960	..	..	1,218

**SUNLIGHT CLINIC**

A.L.S.

During the year 42 children of school age attended the artificial sunlight clinic. The conditions treated were mostly those of general debility, bronchitis and other chest troubles. The number of children completing the course during the year was 32, and there were 10 children under treatment at the end of the year.

**TUBERCULOSIS****Children's Contact Clinic**

Mary D. Gibson

There is again no change to report in the method of referral of cases to this clinic.

We have continued to give prophylactic chemotherapy with Isoniazid and P.A.S. to all children with active primary tuberculosis. In this group are included

all children under the age of three who are found to have a positive tuberculin skin test (not due to previous B.C.G. vaccination), whether or not such children show clinical or radiological evidence of the site of the primary lesion.

The majority of these children receive their treatment at home, the necessary drugs being prescribed by their family doctors through the National Health Service.

During 1960, 29 such children received prophylactic chemotherapy at home; those of school age, as in previous years, continued to attend school and take part in all school activities except swimming. In addition, four children were admitted to hospital for treatment. In three cases the child was ill with its primary T.B. infection and, in one case, the child developed an acute pneumonia soon after showing signs of the primary T.B. infection and it was felt that it would be safer to have her under close observation. Both conditions cleared up uneventfully.

During 1960, 767 attendances were made at this clinic, the majority of these by children having check up examinations for old infections; 95 were discharged as being no longer in need of further follow up.

### **X-Ray of Teaching and Other Staffs**

The arrangements for the periodic chest X-ray of teachers were continued throughout the year. Altogether 589 teachers were X-rayed out of 867 who were given appointments. Of this number, 13 teachers were given further appointments to have large films taken. The reports of these large films in one case showed a collapse which was later found to be due to old pleural thickening due to old effusion, the remainder were satisfactory as regards tuberculosis. One teacher was found to have pleural thickening in the right cardio-phrenic angle. The proportion of absentees is about the same as last year, though every effort is made to meet the convenience of the teachers and the schools in making appointments. Occasionally also we still encounter teachers who refuse to have X-rays and there were three such refusals during the year.

The arrangements for the periodic routine medical examination of school meals staff, including chest X-ray, were continued during the year, and 650 members of school meals staffs were examined during 1960 under these arrangements.

### **YOUTH EMPLOYMENT SERVICE**

B. M. Dyer

#### **The Employment of Handicapped Children**

During the year 43 educationally sub-normal boys and 18 girls were interviewed by the Youth Employment Officer prior to leaving the special schools.

The good employment situation has helped boys in starting work. Only one boy, who had very low attainments, has stayed at the Training Centre. Two others attended for a short time prior to entering employment, and another boy with good attainments, but having a severe speech defect and poor appearance, was placed in employment following assessment at the Industrial Rehabilitation Unit. A notable achievement was the acceptance by British Railways of two boys from Russell Town Special School for E.S.N. boys to become junior messengers.

The fullest co-operation has been given by the schools, the Mental Health Service and the Special Schools Welfare Department.

As far as the girls are concerned, difficulties have been encountered in finding employment in factories, as much of the work requires the worker to keep up to a certain speed. During the year girls have entered employment

such as domestic and laundry work, work in a bakery and simple factory work. On the whole the employment situation is quite good, but in two cases it has been necessary for girls to go to the Training Centre as no suitable employment could be found for them when they left their jobs. Several of this year's leavers have settled well into employment and in two instances, employers have remarked to the Youth Employment Officer on their good work.

The Youth Employment Officers have visited all the Authority's special schools and in addition have seen a number of physically and mentally handicapped pupils in other schools. By means of interviews with parents and school staffs as well as help from medical and social workers, the Youth Employment Officer tries to find out as much as possible about each boy and girl in order to suggest suitable occupations and make contact with the right type of firm. In some cases special assessment at the Ministry of Labour's Industrial Rehabilitation Unit is of great assistance, and one severely handicapped girl (spastic paraplegia and hydrocephalus) after a course at the Industrial Rehabilitation Unit is now learning bookbinding in a printing firm. Deaf and partially deaf children found work without great difficulty; two girls in sewing factories and one in an office; one boy in a factory and another on a farm. A partially sighted girl obtained work as a shorthand-typist, having been trained for this.

**BRISTOL EDUCATION COMMITTEE**

*Chairman:* Councillor P. C. BERRILL

*Vice-Chairman:* Councillor N. G. REECE.

**Special Services Committee**

*Chairman:* Alderman F. G. W. CHAMBERLAIN

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**Chief Education Officer**

G. H. SYLVESTER, M.A.

**Principal School Medical Officer and Medical Officer of Health**

R. C. WOFINDEN, M.D., B.S., D.P.H., D.P.A.

**Deputy Principal School Medical Officer and Deputy Medical Officer of Health**

J. F. SKONE, M.D., D.C.H., D.P.H., D.I.H.

**Senior Medical Officer, School Health Service**

A. L. SMALLWOOD, M.D., D.C.H., D.P.H.

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**City and County of Bristol**

Population (estimated mid-1960)	..	..	..	..	..	..	433,750
Schools:—							
Number of School Departments	..	..	..	..	..	..	221
Average Number on Registers	..	..	..	..	..	..	66,490
Average Attendance	..	..	..	..	..	..	60,065

**STAFF****Principal School Medical Officer and Medical Officer of Health**

R. C. WOFINDEN, M.D., D.P.H., D.P.A.

**Deputy Principal School Medical Officer and  
Deputy Medical Officer of Health**

J. F. SKONE, M.D., D.C.H., D.P.H., D.I.H.

**Senior Medical Officer, School Health Service**

A. L. SMALLWOOD, M.D., D.C.H., D.P.H.

**School Medical Officers**

(Joint Appointments with the Local Health Authority)

Mrs. Monica A. Pauli, M.B., Ch.B., B.A.O.

R. J. Irving Bell, M.R.C.S., L.R.C.P., D.P.H.

Mary Gibson, M.B., Ch.B., D.P.H.

A. M. Fraser, L.R.C.P., L.R.C.S., D.P.H.

B. J. Boulton, M.B., Ch.B.

Clara Jahoda, M.D. (Vienna)

Helen M. Gibb, M.B., Ch.B., D.P.H.

J. E. Kaye, Med. Dip. (Warsaw), D.P.H.

J. L. S. James, M.R.C.S., L.R.C.P. (Anaesthetist)

Kathleen E. Faulkner, M.B., Ch.B., D.C.H., D.P.H.

D. J. Sheerboom, M.B., B.S., D.P.H. (to 30.9.60)

Mrs. Marjorie Mair, B.Sc., M.B., Ch.B.

P. Tomlinson, M.D., D.P.H.

G. N. Febry, M.B., Ch.B., D.P.H.

M. R. Alderson, M.B., B.S., M.R.C.S., L.R.C.P., D.R.C.O.G.

Irene L. Chesham, M.B., Ch.B., D.P.H.

W. M. Sutcliffe, M.B., Ch.B., D.P.H., D.I.H.

R. P. Ryan, M.B., B.S., D.P.H. (to 21.5.60)

D. B. Hill, M.A., M.B., B.Ch., D.P.H. (from 15.8.60)

A. W. Macara, M.B., Ch.B., D.P.H. (from 7.9.60)

**Part-time School Medical Officers**

H. F. M. Finzel, M.D.

C. Jean Fraser, M.B., Ch.B., D.P.H.

**Consultants—Part-time**

Ear, Nose and Throat	..	H. D. Fairman, F.R.C.S.E., D.L.O. J. Freeman, F.R.C.S., D.L.O. R. K. Roddie, F.R.C.S.* (from 4.6.60)
Orthopaedic	..	K. H. Pridie, M.B., B.S., F.R.C.S.* D. M. Jones, M.B., B.S., M.Ch.(Orth.), F.R.C.S.* H. Keith Lucas, M.Ch. (Orth.), F.R.C.S.E.
Ophthalmic	..	R. R. Garden, M.A., M.B., D.O.M.S., D.P.H. P. Jardine, F.R.C.S. H. Bannerman, M.B., D.O.M.S.*
Cardio-rheumatic	..	C. Bruce Perry, M.D., F.R.C.P. (by arrangement with United Bristol Hospitals)
Dermatology	..	R. P. Warin, M.D., M.R.C.P.* C. D. Evans, B.A., M.B., B.Ch. (Camb.)*
Chiropody	..	L. I. W. Tasker, M.Ch.S.
Orthoptist	..	Miss M. J. Smith, SRN, D.B.O.*

**Dental Surgeons**

(Joint Appointments with the Local Health Authority)

Principal School Dental Officer	..	J. McCaig, L.D.S.
School Dental Officers	..	A. H. V. Williams, L.D.S. H. W. Williams, L.D.S. Alice M. Trump, L.D.S. Helena Blinkworth, L.D.S. J. F. Sellin, L.D.S. R. D. Hepburn, L.D.S. W. E. C. Chaplin, L.D.S. (to 5.10.60) H. Hazell, L.D.S. (part-time)*
Dental Hygienist	..	Jean E. Bailey

**Child and Family Guidance Clinic**

Senior Consultant	..	R. F. Barbour, M.A., F.R.C.P., D.P.M.
Consultant Psychiatrists	..	W. L. Walker, M.B., Ch.B., D.P.H., D.P.M.* H. S. Coulsting, M.B., Ch.B., D.P.M.*
Psychiatric Registrars	..	W. Johnson, M.R.C.S., L.R.C.P. (to 30.4.60)* Helen S. Mathewson, M.B., Ch.B., D.P.M. (from 1.5.60)
Senior Educational Psychologist	..	R. V. Saunders, M.A., B.Ed.
Senior Assistant Educational Psychologist	..	W. C. King, B.Sc. (to 29.2.60)
Educational Psychologists	..	E. Jean Horn, M.A., Dip. Ed. (from 1.3.60) Kathleen Craib, M.A., B.Ed. J. Dunham, M.Ed., B.Sc. (from 1.1.60) H. I. Hickish, B.A. (from 1.1.60) K. W. Wedell, M.A., Ph.d. (from 2.8.60)
Psychiatric Social Workers	..	Miss B. Stubbs (Senior P.S.W.) Mrs. L. Gatliff Miss B. Harrison (to 31.12.59) Miss J. Laver Miss P. Birkett Mrs. J. D. Scrine (part-time) (to 1.8.60)

**Speech Therapy**

Speech Therapists	..	Kathleen Coleman, L.C.S.T., S.R.N. Helen M. Streat, L.C.S.T. Anne Johnson, L.C.S.T. (to 30.6.60) Margaret J. Henshaw, L.C.S.T. (from 1.12.60) Mrs. Beryl Saunders, L.C.S.T. (Claremont School)
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**Nursing Service**

Chief Nursing Officer	..	Miss L. M. Bendall, S.R.N., S.C.M., H.V. Cert.
Deputy Chief Nursing Officer	..	Miss A. I. Rowbottom, S.R.N., S.C.M., Q.I.D.N., H.V.Cert.

\* By arrangement with the Regional Hospital Board.

The following staff changes took place during the year in the joint staff of the Local Health and Education Authorities:—

*Medical*

- Appointments . . D. B. Hill, M.A., M.B., B.Ch., D.P.H. (5.8.60)  
A. W. Macara, M.B., Ch.B., D.P.H. (7.9.60)
- Resignations . . D. J. Sheerboom, M.B., B.S., D.P.H., (30.9.60)  
R. P. Ryan, M.B., B.S., D.P.H. (21.5.60)

*Dental*

- W. E. C. Chaplin, L.D.S. (died 5.10.60)

*Child and Family Guidance*

- Resignation . . Joan D. Scrine, Psychiatric Social Worker (part time) 1.8.60

—————

Persons other than those whose names appear in the list of staff who have contributed to this report are the following:—

- L. A. Tavener, *Superintendent Welfare Officer*.  
Miss T. B. Hetherington, *Chief Organiser of School Meals*  
F. J. Redstone, F.R.S.H., F.S.P.H.I., *Chief Public Health Inspector*  
J. MacA. Milne, *Chief Organiser of Physical Education*  
Miss C. Cooke, M.B.E., *Senr. Woman Organiser of Physical Education*  
R. E. Olding, *Head of Elmfield School for Deaf Children*  
R. G. Lewis, *Head of Eastville Junior Mixed School*  
Miss R. Smith, *Teacher of the Deaf, Eastville Junior School*  
Miss R. H. Sturman, *Visiting Teacher for Partially Deaf Children*  
J. N. Tolley, *Head of Russell Town School for E.S.N. Senior Boys*  
Miss I. M. Bond, B.A., *Head of the House-in-the-Garden School for E.S.N. Senior Girls*  
Miss J. Davis-Morgan, *Head of Henbury Manor School for E.S.N. Junior Children*  
Miss M. H. Davies, *Head of Croydon Hall Residential School for E.S.N. Senior Girls*  
Mr. G. A. Morris, *Head of Kingsdon Manor Residential School for E.S.N. Senior Boys*  
Mr. C. Williams, *Head of South Bristol Open Air School*  
Miss M. J. Ram, B.A., *Head of Claremont School for Spastic Children*  
Mrs. Grace E. Woods, M.D., D.C.H., D.P.H., *Medical Officer, Cerebral Palsy Assessment Clinic and Claremont School for Spastic Children*  
B. M. Dyer, M.B.E., B.A., *Youth Employment Officer*.

## SCHOOL CLINICS

Name of Clinic	Address	Clinics Held
Central Health Clinic	Tower Hill, Bristol 2. Tel. 2-6602 and 29-2070.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic, Orthopaedic, Aural and Dermatological Consultant Clinics, Chiropody Clinic, Enuretic Clinic, Artificial Sunlight Clinic, T.B. Contact Clinic, Children's Chest Clinic.
Charlotte Keel Clinic	Claremont Street, Stapleton Road. Tel. 5-1545.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Bedminster Health Clinic	Wedmore Vale, Bristol 3. Tel. 66-3798	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Granby House Clinic	St. John's Road, Bedminster. Tel. 66-4443.	Minor Ailment Inspection and Treatment.
Speedwell Health Clinic	Whitefield Road, Speedwell, Bristol 5. Tel. 67-3194.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Portway Health Clinic	Shirehampton, Bristol. Tel. Avonm'th 2900.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Southmead Health Clinic	Monks Park Ave., Southmead. Bristol. Tel. 62-6414.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Brooklea Clinic	Wick Road, Brislington. Tel. 7-8861.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Knowle Health Clinic	Broadfield Road, Bristol 4. Tel. 7-6643.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Lawrence Weston Clinic	Ridingleaze, Lawrence Weston. Tel. Avonm'th 3205.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
William Budd Health Centre	Leinster Ave., Bristol 4. Tel. 66-1112.	Minor Ailment Inspection and Treatment.
Mary Hennessy Clinic	Hareclive Road, Hartcliffe, Bristol 3. Tel. 66-4282.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
John Milton Clinic	Crow Lane, Brentry, Bristol. Tel. 62-2160.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Amelia Nutt Clinic	Withywood Tel. 66-4901	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Aural Consultant Clinic
Connaught Road School Clinic	Connaught Road School, Bristol 4.	Minor Ailment Treatment.
Verrier Road Clinic	Verrier Road, Redfield. Tel. 5-6387	Minor Ailment Treatment.
Child and Family Guidance Clinic	7 Brunswick Square, Bristol 2. (Headquarters). Tel. 2-6181	
Speech Clinics	1 Argyle Road, St. Paul's, Bristol 2. (Headquarters). Tel. 2-6760 and Knowle Health Clinic.	

## APPENDIX A

### An Experiment in Health Education

A. W. Macara

Many workers in the School Health Service are urgently discussing its development and adaptation to meet changing circumstances and new needs.

A modest contribution to this study is being made at one of the Authority's Secondary Schools which opened its doors in 1959, and comprised a first and second year by October 1960, when a School Medical Officer was seconded to attend for one half-day every week. The idea was to integrate him as a member of the staff, and give him an opportunity to acquire an intimate knowledge of the work of a school catering for children of a wide range of ability. This should provide a firm basis for an appraisal of the provisions and functions of the Service and a study of the possibilities for its development and the extension of co-operation between the interested parties.

The S.M.O.'s first few months have been spent in getting to know both the staff and the children informally and in the classroom. He has observed teachers taking classes in a wide range of subjects, and has personally taken lessons with most classes, in various aspects of Science and Health Education, dealing with matters which have some topical relevance which are related to the current curriculum, or which are raised by the children in free question and answer sessions. Practical instruction has been given to several classes in the rationale and techniques of artificial respiration. This work has been of two-way value; to the S.M.O. in acquiring teaching techniques and assessing needs, and to teachers in stimulating their interest and co-operation in Health Education.

During this period the S.M.O. has carried out periodic medical inspections, receiving beforehand a short briefing on each child from notes provided by the teachers, which gave him a much clearer picture of the whole child and made the inspections more valuable than is usually possible to all concerned. He has also examined children referred by teachers who have had reason to suspect either that some defect exists requiring medical advice or that there is some other problem affecting the child's attention, conduct or progress at school which the S.M.O. is well placed to investigate and follow up. The S.M.O. has been impressed by the number of speech defects and early behavioural disorders detected by an alert teacher, which might well have remained unsuspected at a periodic medical inspection and yet required immediate attention.

One case, perhaps typical of many, stands out as an example of the value of close co-operation. An 11-year-old girl, an only child, was not making the expected progress in her first few months in a lower set, chiefly due to repeated absences for a variety of apparently genuine yet trivial reasons. Observation and examination of the girl revealed no physical abnormality although she was not very robust. She appeared to be shy and introspective, but there were no manifestations of nervousness; she liked school, had good friends and was a conscientious scholar. The family doctor, who had not been consulted during this period, indicated that the parents were decent but inadequate people. Mother was very highly-strung with a long psychoneurotic history. The Headmaster and the S.M.O. interviewed the parents together, confirmed this background and were satisfied that the trouble lay in parental over-anxiety; every innocent little sniffle was a sinister threat to their delicate child's health, and demanded confinement at home. The parents also showed a complete lack of imagination in their attempts to support the girl's school work. This was the ideal opportunity for the Headmaster and S.M.O. jointly to give reassurance and advice. The girl's progress in three months to the time of writing has been much improved, and there has been only one short absence from school.

A pilot survey on smoking by schoolchildren has been conducted, the whole second year being covered in one day to reduce the prejudicial effects of discussion to a minimum. It is believed that the personal presentation of the questionnaire by a doctor whom the children knew, reinforced by the Headmaster's splendid reassurance of anonymity, provoked answers of a high degree of reliability. The aim was to assess the smoking habits and views of the children as pointers to the best lines of approach in anti-smoking propaganda. An initial analysis reveals some interesting facts. By the age of 13 about 30 per cent of the boys, and half this proportion of girls, are smoking cigarettes regularly. The maternal influence is very striking. There is a cheerful disrespect for the law, the large majority of smokers confidently asserting its illegality. A remarkable awareness is shown of the grave dangers to health: most of the children in every ability stream believed that smoking caused cancer. On the other hand, when they were asked to give arguments against smoking only a minority cited health reasons, compared with many who considered it uneconomic. These results suggest two things; that those who advocate reinforcing the law (which covers only the sale of cigarettes to children under the age of 17) are wasting their time; the only type of propaganda likely to succeed is that which tries to counteract the tendency of these children to think that the consequences are so remote that they need not be concerned at the present.

#### *Sex Education*

Sex Education is truly education for life, and ideally it should begin with simple, truthful answers from the parents to the young child's first tentative queries. Evasiveness or deception at this stage can prejudice the development of a balanced attitude in the mind of the growing child, and where the parents neglect their duty, it might be felt that the Primary School teacher is best placed to make a timely rescue bid. They might also consolidate the embryonic understanding of the child who does receive help at home.

Rightly or wrongly, little specific effort is devoted to the subject at the primary stage and most Primary Heads regard it as lying outside their province. Thus the Secondary Schools find themselves faced with a problem, the gravity and urgency of which far outweighs any other single factor in the health and welfare of the school child. It is a harsh fact that there is a startling increase in promiscuity amongst our young people, with ever more tragic consequences. Whatever the reasons, and it may be largely that children mimic the worst excesses of adult society, the need for action is clear. Our chief aim must be to inculcate a healthy attitude before the ever-lower age when emotional involvement in the changes of puberty begins to complicate the situation. So it is felt that sex education should be given as early as possible in the Secondary school and we are indebted to the Deputy Headmistress, whose subject is Biology, for this account of the approach employed at her school:—

"A reasonable understanding of human reproduction cannot be absorbed unless the more obvious anatomy and physiology of the respiratory, vascular, digestive and excretory systems are understood. Consequently, human reproduction was not reached until the middle of the first term of the second year, but next year, by reorganising the General Science course in the first year and spending more time on Biology, reproduction will be brought into first year work."

Before an explanation of human reproduction was attempted the reproduction and life history of the herring, frog and bird were studied. Herring and frogs were dissected by children and respiratory, digestive and reproductive systems examined. The hen's egg was examined. The

mating and fertilisation methods of these three animals were discussed, the advantages of internal fertilisation being agreed.

The text book used for the whole of the course on the human body is Cyril Bibby's "An active Human Biology". When left to read alone from another chapter in the book children frequently turned to the chapter on reproduction, thus the lessons on human reproduction came as a matter of course. In taking the lessons with five sets of children from "A" to "Lower B" only two children were noticeably embarrassed and both of these were physically well-developed boys. All "A" and "B" sets were given books to read on their own, in school or at home. They had either the two books "A Story about You" and "What's Happening to Me" by Lerrigo and Southard, or "How Life is Handed On" by Bibby. Before children started reading these books the teacher turned through the pages with them, explaining the aim of each chapter and studying each diagram. The importance of reading the book from the beginning was emphasised, particularly in the case of the Lerrigo and Southard books. At this stage they are better than Bibby for private reading as they have less scientific fact and a considerable amount on social behaviour which is very well expressed. It seems undesirable to talk at any length in a mixed class of boys and girls on such topics as feeling unwell during menstruation, or "wet dreams". Each sex should understand the emotional as well as the anatomical and physiological make-up of the opposite sex and these books should help that understanding.

The "Lower B", "C" and "D" sets were not given any books to read as it was considered they may not understand the text and might glean misinformation from their lack of understanding and possible lack of persistency in reading the book right through. More lessons were spent on reproduction and more questions were asked by the children.

It is not considered that these lessons complete the sex education of these children. House Tutors are being encouraged to be ready to answer any questions and the girls' P.E. teacher is prepared to cope with any menstruation problem a girl might have.

*Note*—The children are divided into seven sets: two "A" sets, two "B" sets, a "Lower B" and "C" and a very small "D" set."

The S.M.O. and members of the Staff all benefited from a full discussion of the problem at a staff meeting and all were agreed that teachers should welcome and exploit rather than shun opportunities arising in the course of lessons in any subject, to impart sound enlightenment. The S.M.O. addressed an enthusiastic meeting of parents, stressing their primary privilege and responsibility and advising upon the handling of general and specific aspects of the subject. At this meeting parents stated that children had shown them the books they had been given to read and that they had been interested in reading the books with the children and much appreciated that they had access to such books in school. It is intended to discuss the subject further with parents and it is felt that a meeting early in the school session to co-ordinate the educational approaches of home and school and to secure the co-operation of the parents of new entrants is desirable.

#### *Physical Education*

Never before, in the field of physical education, has the standard of performance of the average child in this country been so high, and it has recently been shown that boys and girls in Britain are fitter and perform set tests better

than their United States counterparts. Indeed, British girls aged 10-13 showed superiority over American boys of the same ages in a majority of the tests.

This general upgrading in performances has thrown the plight of the inadequate performer into ever-sharper relief. It is planned to test both the physical capacity and the specific athletic skills of the boys at the school to ascertain which individuals fall significantly below the standards which might reasonably be expected in relation to their fellows. They will then be subjected to further study by both the P.E. teacher and the S.M.O., to determine how best to assist those boys with recognised physical handicaps, and also to guide and encourage those whose disadvantage appears to be psychogenic. It is felt that when this part of the child's development is backward it can have a disproportionately adverse effect on his progress as a whole.

#### *Recommendations*

Bristol schoolchildren are taught to swim in their first year of secondary school life if they have not already learned to do so at the primary stage and every effort is made at this school, as elsewhere, to attain the highest standards leading to proficiency in life-saving. In view of this fact, and in the light of the recent tragic fatality at Speedwell Baths which revealed that attendants are not necessarily trained in first aid, it seems strange that provision is not made to teach a simple technique of artificial respiration simultaneously with the early swimming instruction. The children are themselves first on the scene of any mishap and are the real potential "first aiders". At this school the P.E. teacher and the S.M.O. will join forces to teach each new swimming class the currently-approved method of artificial respiration before they enter the water.

It is suggested for general application throughout the Service that teachers might be encouraged even more than they are, to provide the S.M.O. at medical inspections, with any information or observations on individual children which they think might be relevant.

It is too early to make detailed proposals upon the integration of instruction in health matters with the curriculum as a whole, but two recommendations might be offered. First, every opportunity to offer enlightenment should be fully exploited; before immunisation sessions or BCG vaccination, for example, the children concerned might be assembled and addressed by the S.M.O. who would briefly explain the nature of the disease, the rationale of immunisation and the advantages of prophylaxis. Second, S.M.O.s might conduct "Forums" in health matters, to correct the many fallacious ideas children commonly put forward which are beyond the scope of the lay teacher, and to discover those topics which lend themselves profitably to well-timed advice.

## APPENDIX B

### Films on Handicapped Children

Three films have been produced in recent years showing the work carried out in Bristol for the care and education of children suffering from various forms of disability. These films have all been made for the Authority by Mr. P. Grosset of the Bristol Cine Society and are in 16 m.m. colour film with a sound commentary.

The first film was produced in 1958 with the help of funds provided by the parents of children at the industrial and training centre. It is entitled "Marlborough House" and deals with all aspects of the care and training of mentally handicapped children including country and folk dancing by the girls, and shots of the Guides and Scouts activities. The film shows that mental subnormality can be treated just as can physical disorders. It shows a positive approach to the problem where children who have been thought to be unsuitable for education in school can be trained and equipped to take their places in society as useful citizens. This film was widely acclaimed as one of the best amateur films of its kind and gained the award of the trophy for one of the ten best amateur films of the year, a prize as the best documentary film at the Scottish Amateur Film Festival, and a special award in the B.M.A. film competition.

The second film produced in 1959 is entitled "Claremont" and describes the education and treatment of children suffering from cerebral palsy who attend the Bristol Education Committee's special school for spastic children at Claremont, Bristol. It shows the various forms of treatment and scenes of classroom activities. There are shots showing children receiving instruction in educational subjects from the teacher with the help of many ingenious aids to enable them to write and manipulate figures. Scenes are also included of the children receiving physiotherapy, movement training and speech therapy, and the film indicates the special difficulties of the children at play and at meal times and in domestic science lessons. There are also scenes taken of the children on an excursion to Weston-super-Mare. This film gives a graphic insight into the work which is being done for these severely handicapped children, and the way in which they are being helped to overcome their disabilities. This film also aroused great interest, and it was regarded as one of the best amateur films of its year. It received several awards, including an award as one of the ten best amateur films of the year, the Oliver Bell Trophy at the Scottish Amateur Film Festival, the Daily Mail Challenge Cup at the Annual Competition of the Institute of Amateur Photographers, an award of a cup for the best documentary film, and a silver medal from the British Medical Association.

The final film made in 1960 is entitled "The Helping Hand" and financial assistance of the cost of producing the film was given by the Bristol and District Society for Mentally Handicapped Children. It shows the facilities provided for the education and training of children suffering from various handicaps. It starts with scenes at Winford Orthopaedic Hospital School, and follows with shots at South Bristol Open Air School for delicate and physically handicapped children, the School for the Deaf, and of children attending the special classes for educationally sub-normal pupils in an ordinary school, and finally scenes taken at the Education Committee's Croydon Hall Residential School for senior educationally sub-normal girls. This film also was very well received and gained an award in the reserve category of the ten best amateur films of the year.

All these films have been in constant demand for showing not only in the Bristol area but in all parts of the country. In fact they have become so well recognised as being among the best films of their type that enquiries have been received for the purchase of copies of the films from a number of countries outside Britain.

It is hoped that they will do much to help the public appreciate the services available for handicapped children.

## APPENDIX C

### School Accidents

C. E. Cooke

On comparing the accident rate per cent over the years 1958–60, it would appear that some schools are indeed accident prone.

The following schools have a consistently high accident rate per 100 of total accidents reported.

		1958	1959	1960
School A.	Bilateral mixed .. ..	4·8	4·6	4·6
"	B. " " .. ..	2·3	5·5	3·6
"	C. " " .. ..	4·2	3·0	3·6
"	D. Secondary Modern Boys .. ..	2·3	4·5	4·1
"	E. Infant School .. ..	2·5	2·3	2·8

It must be remembered that some Heads are more meticulous in reporting minor accidents than others, but even so it is difficult to understand why these schools should have a consistently high accident rate. It will be necessary to record the accident statistics over a longer period of years, however, before drawing any definite conclusions. School E is well above the average for infant schools, four of which had no accidents recorded over the same period of years.

Medical and architectural reasons for accidents should also be considered. In school A, for example, several accidents have occurred on the staircase. Children are still having fingers squeezed in doors.

The environment of the school may also be an important factor, and large new schools appear to take some years to settle down to the calmer atmosphere, experienced in the more established older schools, where cramped space does not seem to account for more accidents.

Most of the accidents in the Bilateral schools were sustained on the games field or in the gymnasium, and in the case of schools A and C, in the passages and on the stairs.

School A had many cuts, one received by a boy on the games field who had his mouth cut by a knitting needle—needless to say this occurred in playtime. Five accidents were caused by forks piercing feet while gardening.

Schools with the highest number of accidents in 1960 were as follows:—

1. A junior boys' school with a rate of 7·2
2. A secondary boys' school with a rate of 4·6
3. A junior mixed school with a rate of 4·3
4. Another junior mixed school with a rate of 4·1
  1. Is a small school of 180 boys. Most accidents took place in playtime.
  2. Five of these accidents took place during woodwork, and the others in playtime were various.

Fifty-eight accidents occurred in the classroom, chiefly falls, cuts, bumps and foreign bodies. These last included acid, pencil and glass in the eyes, and one infant swallowed a halfpenny, a junior boy swallowed a pin, and a secondary girl swallowed a safety pin. None suffered ill effects.

There are, however, 15 schools where no accidents have been reported during the last three years.

- 1 Secondary Modern Boys' School
- 10 Junior Mixed Schools
- 4 Infants' Schools

In 1960 alone 53 schools reported no accidents. This absence of accidents may be accounted for by a more relaxed atmosphere which often exists in well established schools, and where the relationship between Heads, staff and children is one of ease and respect.

**STATISTICAL TABLES**  
**YEAR ENDED 31st DECEMBER, 1960**

**PART I—MEDICAL INSPECTION OF PUPILS ATTENDING MAINTAINED PRIMARY AND SECONDARY SCHOOLS (INCLUDING NURSERY AND SPECIAL SCHOOLS)**

**TABLE A.—PERIODIC MEDICAL INSPECTIONS**

<i>Age Groups Inspected (By year of birth)</i>	<i>No. of Pupils Inspected</i>	<i>Physical Conditions of Pupils Inspected</i>			
		<i>Satisfactory</i>	<i>% of Col. 2</i>	<i>Unsatisfactory</i>	<i>% of Col. 2</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1956 and later	904	890	98·5	14	1·5
1955	833	802	96·3	31	3·7
1954	3,585	3,454	96·3	131	3·7
1953	1,242	1,201	96·7	41	3·3
1952	401	388	96·8	13	3·2
1951	749	717	95·7	32	4·3
1950	2,042	1,980	97·00	62	3·0
1949	1,624	1,593	98·1	31	1·9
1948	722	702	97·2	20	2·8
1947	650	634	97·5	16	2·5
1946	1,471	1,443	98·1	28	1·9
1945 and earlier	5,106	5,046	98·8	60	1·2
TOTAL	19,329	18,850	97·5	479	2·5

**TABLE B.—PUPILS FOUND TO REQUIRE TREATMENT AT PERIODIC MEDICAL INSPECTIONS (excluding Dental Diseases and Infestation with Vermin)**

<i>Age Groups Inspected (By year of birth)</i>		<i>For defective</i>	<i>For any of the</i>	<i>Total individual pupils</i>
		<i>vision (excluding squint)</i>	<i>other conditions recorded in Part II</i>	
<i>(1)</i>		<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1956 and later	..	..	4	95
1955	..	..	8	111
1954	..	..	59	588
1953	..	..	32	204
1952	..	..	24	92
1951	..	..	40	142
1950	..	..	88	304
1949	..	..	135	307
1948	..	..	87	155
1947	..	..	106	181
1946	..	..	172	289
1945 and earlier	..	..	615	971
TOTAL	..	..	1,370	3,439

**TABLE C.—OTHER INSPECTIONS**

Number of Special Inspections	..	..	..	..	18,114
Number of Re-inspections	..	..	..	..	27,575
Total	..	..	..	..	45,689

**TABLE D.—INFESTATION WITH VERMIN**

(a) Total number of individual examinations of pupils in schools by school nurses or other authorised persons	..	..	..	..	123,485
(b) Total number of individual pupils found to be infested	..	..	..	..	869
(c) Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944)	..	..	..	..	138
(d) Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944)	..	..	..	..	11

**PART II—DEFECTS FOUND BY MEDICAL INSPECTION DURING THE YEAR**

**TABLE A.—PERIODIC INSPECTIONS**

Defect or Disease	Entrants (T)	Leavers (T)	Others (T)	Total (T)	Observation (O)
Skin . . . . .	101	26	153	19	402
Eyes—(a) Vision . . . . .	100	36	690	29	1,370
(b) Squint . . . . .	82	15	15	6	173
(c) Other . . . . .	29	3	12	2	55
Ears—(a) Hearing . . . . .	64	29	24	8	127
(b) Otitis Media . . . . .	54	16	22	8	111
(c) Other . . . . .	8	3	8	—	5
Nose and Throat . . . . .	317	218	53	15	511
Speech . . . . .	41	68	6	1	68
Lymphatic Glands . . . . .	43	94	1	—	51
Heart . . . . .	32	35	36	19	95
Lungs . . . . .	87	75	21	27	170
Developmental—					
(a) Hernia . . . . .	14	7	1	—	25
(b) Other . . . . .	20	70	11	15	10
Orthopaedic—					
(a) Posture . . . . .	18	21	32	9	72
(b) Feet . . . . .	22	23	17	5	49
(c) Other . . . . .	27	40	42	26	117
Nervous System—					
(a) Epilepsy . . . . .	14	6	18	2	58
(b) Other . . . . .	6	8	1	2	13
Psychological—					
(a) Development . . . . .	20	22	3	3	51
(b) Stability . . . . .	63	36	12	6	71
Abdomen . . . . .	6	4	7	—	20
Other . . . . .	18	69	50	11	163

(T)=Treatment. (O)=Observation.

**TABLE B.—SPECIAL INSPECTIONS**

Defect or Disease	Treatment	Pupils req. Treatment	Pupils req. Observation
Skin . . . . .	..	3,159	56
Eyes—(a) Vision . . . . .	..	1,061	152
(b) Squint . . . . .	..	80	22
(c) Other . . . . .	..	419	18
Ears—(a) Hearing . . . . .	..	114	39
(b) Otitis Media . . . . .	..	85	19
(c) Other . . . . .	..	168	13
Nose and Throat . . . . .	..	451	141
Speech . . . . .	..	72	42
Lymphatic Glands . . . . .	..	34	53
Heart . . . . .	..	34	29
Lungs . . . . .	..	83	43
Developmental—			
(a) Hernia . . . . .	..	14	8
(b) Other . . . . .	..	40	88
Orthopaedic—			
(a) Posture . . . . .	..	32	26
(b) Feet . . . . .	..	98	21
(c) Other . . . . .	..	86	36
Nervous System—			
(a) Epilepsy . . . . .	..	13	6
(b) Other . . . . .	..	14	22
Psychological—			
(a) Development . . . . .	..	36	27
(b) Stability . . . . .	..	61	38
Abdomen . . . . .	..	16	2
Other . . . . .	..	4,167	96

**PART III—TREATMENT OF PUPILS ATTENDING MAINTAINED PRIMARY AND SECONDARY SCHOOLS (INCLUDING NURSERY AND SPECIAL SCHOOLS)**

**TABLE A.—EYE DISEASES, DEFECTIVE VISION AND SQUINT**

		<i>Number of cases known to have been dealt with</i>
External and other, excluding errors of refraction and squint	..	1,315
Errors of refraction (including squint) ..	..	4,371
	TOTAL	5,686
Number of pupils for whom spectacles were prescribed	..	2,298

**TABLE B.—DISEASES AND DEFECTS OF EAR, NOSE AND THROAT**

		<i>Number of cases known to have been dealt with</i>
Received operative treatment—		
(a) for diseases of the ear ..	..	86
(b) for adenoids and chronic tonsillitis ..	..	1,771
(c) for other nose and throat conditions ..	..	214
Received other forms of treatment ..	..	678
	TOTAL	2,749

Total number of pupils in schools who are known to have been provided with hearing aids—

(a) in 1960 ..	..	..	..	..	..	..	22
(b) in previous years ..	..	..	..	..	..	..	106

**TABLE C.—ORTHOPAEDIC AND POSTURAL DEFECTS**

		<i>Number of cases known to have been treated</i>
(a) Pupils treated at clinics or out-patients departments ..	..	389
(b) Pupils treated at school for postural defects ..	..	—
	TOTAL	389

**TABLE D.—DISEASES OF THE SKIN**  
(excluding uncleanliness, for which see Table D of Part I)

		<i>Number of cases known to have been treated</i>
Ringworm—(a) Scalp ..	..	—
(b) Body ..	..	122
Scabies ..	..	9
Impetigo ..	..	107
Other skin diseases ..	..	3,086
	TOTAL	3,324

**TABLE E.—CHILD GUIDANCE TREATMENT**

		<i>Number of cases known to have been treated</i>
Pupils treated at Child Guidance Clinics ..	..	425

**TABLE F.—SPEECH THERAPY**

		<i>Number of cases known to have been treated</i>
Pupils treated by speech therapists ..	..	311

**TABLE G.—OTHER TREATMENT GIVEN**

							<i>Number of cases known to have been dealt with</i>
(a) Pupils with minor ailments	..	..	..	..	..	..	16,713
(b) Pupils who received convalescent treatment under School Health Service arrangements	..	..	..	..	..	..	21
(c) Pupils who received B.C.G. vaccination	..	..	..	..	..	..	5,055
(d) Other than (a), (b) and (c) above							
Chiroprisy	..	..	..	..	..	..	774
U.V.L.	..	..	..	..	..	..	41
Enuresis	..	..	..	..	..	..	214
Asthma	..	..	..	..	..	..	35
Tb. Contacts	..	..	..	..	..	..	464
						<b>TOTAL (a)—(d)</b>	<b>23,317</b>

**PART IV—DENTAL INSPECTION AND TREATMENT CARRIED OUT BY THE AUTHORITY**

(1) Number of pupils inspected by the Authority's Dental Officers:—							
(a) At Periodic Inspections	..	42,081	}	..	Total (1)	46,451	
(b) As Specials	..	4,370	}	..			
(2) Number found to require treatment	..	..	..	..	..	29,053	
(3) Number offered treatment	..	..	..	..	..	26,794	
(4) Number actually treated	..	..	..	..	..	14,955	
(5) Number of attendances made by pupils for treatment, including those recorded at 11 (h)	..	..	..	..	..	37,499	
(6) Half days devoted to:							
(a) Periodic (School) Inspection	..	310	}	..	Total (6)	5,011	
(b) Treatment	..	..	*	4,701	}	..	
(7) Fillings:							
(a) Permanent Teeth	..	..	18,106	}	..	Total (7)	21,510
(b) Temporary Teeth	..	..	3,404	}	..		
(8) Number of Teeth filled:							
(a) Permanent Teeth	..	..	16,616	}	..	Total (8)	19,882
(b) Temporary Teeth	..	..	3,266	}	..		
(9) Extractions:							
(a) Permanent Teeth	..	..	4,774	}	..	Total (9)	18,076
(b) Temporary Teeth	..	..	13,302	}	..		
(10) Administration of general anaesthetics for extraction					..	..	7,422
(11) Orthodontics:							
(a) Cases commenced during the year	..	..	..	..	..	382	
(b) Cases brought forward from previous year	..	..	..	..	..	231	
(c) Cases completed during the year	..	..	..	..	..	33	
(d) Cases discontinued during the year	..	..	..	..	..	—	
(e) Pupils treated with appliances	..	..	..	..	..	—	
(f) Removable appliances fitted	..	..	..	..	..	—	
(g) Fixed appliances fitted	..	..	..	..	..	—	
(h) Total attendances	..	..	..	..	..	654	
(12) Number of pupils supplied with artificial teeth	..	..	..	..	..	..	102
(13) Other operations:							
(a) Permanent Teeth	..	..	9,504	}	..	Total (13)	15,112
(b) Temporary Teeth	..	..	5,608	}	..		

\* In addition 318 sessions to mothers and young children were given.

The figures given under (11) Orthodontics refer to work done at the diagnostic clinic held at the Authority's Central Clinic. Children requiring treatment with appliances are referred to the Bristol Dental Hospital for further treatment and provision of the necessary appliances. The cases completed (c) are those that were dealt with at the clinic by extractions.

## SCHOOL CLINICS

1959 No. of attend- ances	Work	1960 No. of attend- ances	
	Central Health Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment; orthodontic treatment; oral hygienist; refraction clinic; asthma clinic; enuretic clinic; T.B. contact clinic; treatment of scabies cases; orthopaedic clinic; remedial exercises; electrical treatment; physiotherapy, massage and foot treatment; artificial sunlight treatment ..	
31,589	Brooklea Clinic	Inspection clinic; treatment of minor ailments .. .. .. ..	30,064
4,998	Bedminster Health Clinic	Inspection clinic; treatment of minor ailments .. .. .. ..	3,705
14,736	William Budd Health Centre	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic, dental treatment; and refraction clinic ..	13,495
411	Granby House Clinic	Inspection clinic; treatment of minor ailments .. .. .. ..	315
3,687	Lawrence Weston Clinic	Inspection clinic; treatment of minor ailments .. .. .. ..	3,633
1,466	Knowle Health Clinic	Inspection clinic; dental treatment .. ..	1,735
9,248	Speedwell Health Clinic	Inspection clinic; treatment of minor ailments; dental treatment .. ..	7,927
14,185	Verrier Road Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment and refraction clinic ..	10,148
1,979	Portway Clinic	Treatment of minor ailments .. ..	1,874
10,169	Southmead Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment and refraction clinic ..	9,268
18,680	Charlotte Keel Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment and refraction clinic ..	13,548
8,454	Mary Hennessy Clinic	Inspection clinic; treatment of minor ailments; dental treatment .. ..	7,308
8,592	John Milton Clinic	Inspection clinic; treatment of minor ailments; dental treatment .. ..	6,979
3,901	Amelia Nutt Clinic	Inspection clinic; treatment of minor ailments; dental treatment .. ..	4,449
—	Connaught Road School Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental clinic .. .. .. ..	1,831
13,372	Day E.S.N. Special Schools	Treatment of minor ailments .. .. ..	12,505
305	Novers Open Air School	Treatment of minor ailments .. .. ..	655
11,269	Cardio-Rheumatic Clinic	Remedial exercises and massage; treatment of minor ailments .. .. .. ..	11,265
667	Child Guidance Clinic	Cases of heart disease and rheumatic disease .. .. .. .. ..	681
2,630	Speech Clinics ..	.. .. .. .. ..	4,276
5,160	Dental Hospital	.. .. .. .. ..	4,713
1,361	Total Attendances	.. .. .. .. ..	1,475
167,039			151,849